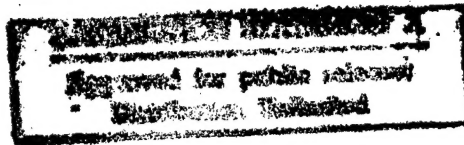


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ECONOMIC AFFAIRS

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24 June 1982

USSR REPORT ECONOMIC AFFAIRS

No. 1015

CONTENTS

ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

General Economic Problems of Eighties Enumerated (A. A. Markin; VESTNIK LENINGRADSKOGO UNIVERSITETA: EKONOMIKA, FILOSOFIYA, PRAVO, No 23, 1981)	1
USSR CSA Plan of Statistical, Methodological Work for 1982 (I. Matyukha; VESTNIK STATISTIKI, Mar 82)	10

INVESTMENT, PRICES, BUDGET AND FINANCE

Balanced Consumer Goods Market Deemed Essential (N. V. Belokh; et al.; IZVESTIYA AN SSSR: SERIYA EKONOMICHESKAYA, Mar-Apr 82)	22
Price Official Describes Current Developments (N. T. Glushkov Interview; EKONOMICHESKAYA GAZETA, Apr 82)	32
Briefs	
Accounting Prices Defined	377
Price Increases Approved, Rejected	37

INDUSTRIAL DEVELOPMENT AND PERFORMANCE

Designing of Industrial Projects (V. I. Nikitin, A. A. Panteleyev; EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA, Apr 82)....	38
---	----

RESOURCE UTILIZATION AND SUPPLY

- Composition, Appraisal of USSR's National Wealth
(L. L. Zusman; IZVESTIYA AKADEMII NAUK SSSR: SERIYA
EKONOMICHESKAYA, Jan-Feb 82) 49

REGIONAL DEVELOPMENT

- Role of State Arbitration Organs in Territorial Production
Complex Development
(N. Sapozhnikov; KHOZYAYSTVO I PRAVO, Dec 81) 67

ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

GENERAL ECONOMIC PROBLEMS OF EIGHTIES ENUMERATED

Leningrad VESTNIK LENINGRADSKOGO UNIVERSITETA: EKONOMIKA, FILOSOFIYA, PRAVO
in Russian No 23, Vypusk 4, 1981 (manuscript received 6 May 81) pp 5-12

[Article by A. A. Markin: "The 26th CPSU Congress on the Specific Features of the Country's Economic Development in the Eighties"]

[Text] The 26th CPSU Congress and its decisions mark a new stage in our country's economic and social development and in the improvement of the entire system of social relations. The report address of the CPSU Central Committee to the 26th congress, which was delivered by L. I. Brezhnev, furnished a profound and comprehensive analysis of the domestic and international situation in the present stage and revealed the prospects of its change over the coming period.

The party's economic policy is a most important line of its activity in guiding the construction of communism. "Guidance of the economy is the heart of the entire activity of the party and state," L. I. Brezhnev noted in his address.¹ The effectiveness of that policy is determined to a considerable degree by how fully and correctly it reflects the real conditions and possibilities of material production in each stage of its development. The decisions of the 26th CPSU Congress concerning economic policy have maintained continuity in defining the party's economic strategy worked out at the 24th and 25th CPSU Congresses on the basis of the programmatic requirement--everything on behalf of man, everything for man's benefit.

The economic laws of the communist mode of production, which constitute the theoretical foundation of the party's economic policy, are fully revealing their content and are fully recognized and realized not only through development of the theory of cognition and methods of research, but also through development of communism's actual material-technical and socioeconomic base. Certain material conditions have to be met for fuller utilization of economic laws and for them to manifest all their aspects. As these conditions have been created, the economic laws have revealed themselves more and more and have become enriched. In this sense one can speak of their development. For example, the proportional development of socialist production is one of the basic features of the economic law of planned development. But agriculture's lag for a considerable time has been detracting from the practical possibility of optimum coordinated development of all the sectors of the economy and has

been generating disproportions between the supply of and demand for consumer goods, between personal money income and its commodity coverage, and so on. The rise and stabilization of the growth rates of agricultural production are, along with everything else, broadening the material capabilities for proportional development of the national economy. Similar examples can be given concerning the basic economic law of socialism, the law of distribution according to work, and so on. Only the higher level of material production afforded our party the possibility of defining at the 24th and 25th CPSU Congresses a line toward a more profound change of direction of the national economy toward the diverse tasks related to increasing the well-being of the people, toward the transition to predominantly intensive methods of economic growth--toward a rise of the efficiency and quality of all work.²

With the party's economic strategy taken as the point of departure, the tasks of the country's economic and social development need to be defined in each stage of that development on the basis of a comprehensive reckoning of the conditions that have come about for material production and a correct assessment of its present and future capabilities and the factors of development. The 26th CPSU Congress noted in this connection the important achievements in economic and social development during the seventies. For instance, the gross social product increased 67 percent between 1977 and 1980, the national income 55 percent, industrial output 78 percent, agricultural output 23 percent, and fixed productive capital 116 percent. The level of the people's material prosperity rose substantially on the basis of economic growth during that period. This is indicated by the 70-percent increase of retail sales over that period.³

At the same time the 26th CPSU Congress noted that the assignments of the 10th Five-Year Plan were not altogether fulfilled. Not all the targets outlined were attained. The congress revealed the objective and subjective reasons for that situation. They include the following: many old mineral deposits were exhausted, including major ones; the main centers of the extractive industry moved eastward and northward; weather conditions were unfavorable for farming in 1977, 1979 and 1980; and the problem of raising production efficiency was not solved.

Assessing the prospects for development, the congress noted that the Soviet Union entered the eighties with a mighty economic and scientific-technical potential and highly qualified personnel. In 1980 the country possessed fixed productive capital worth 1,149 billion rubles, the national income exceeded 450 billion rubles, industrial output had reached 627 billion rubles, and agricultural output was 121 billion rubles. Just during the years of the 10th Five-Year Plan 12.5 million persons acquired an occupation in vocational and technical schools. Higher and secondary specialized institutions trained 10 million specialists in that period,⁴ and in all there were 28.6 million specialists employed in the national economy in 1980, including 12.1 million with higher education and 16.5 million with secondary specialized education.⁵ The Soviet Union occupied first place in the world in production of petroleum, coal, iron ore, pig iron, steel, coke, manufactured fertilizers, diesel and electric road locomotives, tractors, cement, prefabricated reinforced-concrete fabrications and components, woolen fabrics, leather footwear, sugar, butter,

etc. Under those conditions the principal factors of economic growth are now increasing the efficiency of utilization of natural, physical and labor resources and improving the quality of work in all units and at all levels of the national economy.

The addresses of L. I. Brezhnev and N. A. Tikhonov profoundly and comprehensively revealed the peculiarities of the country's economic and social development in the eighties, including the years of the 11th Five-Year Plan.

These peculiarities include, first of all, the continued eastward and northward transfer of the principal areas for development of the extractive industry, which makes production more expensive, increases hauling distances and makes the conditions more complicated for shipping raw materials and fuel. Whereas in 1965 only 1 million tons of petroleum (including gas condensate) were produced in the country's eastern regions, in 1970 its output was already 31 million tons, and in 1980 it was more than 312 million tons. Even in the 10th Five-Year Plan these regions accounted for the entire nationwide growth of petroleum, gas and coal.⁶ The relative share of the eastern regions will increase in the mining of coal; the principal coal deposits are located in the permafrost zone in Eastern Siberia. Given those conditions, we observe a quite marked tendency toward an increase in the capital intensiveness of the extractive sectors. If specific capital investments per unit growth of output in physical terms during the Seventh Five-Year Plan are taken as unity, then in the years of the Ninth Five-Year Plan they were 1.25 for coal and 1.32 for petroleum (including gas condensate), and for gas they were 3.38. In the 10th Five-Year Plan production costs per ton of petroleum were more than twofold higher than in the period before 1972, and in the 11th Five-Year Plan they will increase still more. Specific capital investments per unit output of iron ore increased at least threefold over the 1965-1980 period.⁷

Second, an important feature of the country's development in the 11th Five-Year Plan and in the eighties in general will be the substantial reduction of the growth of labor resources as compared to previous periods. In the 1981-1990 period the total growth of population of working age will drop to 3.8 percent as against 18 percent in the 1971-1980 period.⁸ The shortage of labor resources, brought about by demographic circumstances, is made more acute by shortcomings in investment policy, which until recently was oriented not toward renewal of the existing productive plant, but toward new capital construction, toward increasing the number of jobs. For instance, according to data of the Scientific Research Economics Institute of USSR Gosplan, in the 1971-1975 period in the industrial sector alone more than 2 million new jobs were created for which the labor resources were not fully furnished, and in the 1976-1978 period another 1 million jobs were created in this way.⁹

Third, the ever greater rise of outlays to protect the environment is a peculiarity of economic development in the coming 10 years. Population growth, urbanization, the progressive increase of the production of fuels and raw materials and their intensive consumption and processing are accompanied by a growing scale of waste, emissions and destruction of the soil cover, causing water and air pollution, destruction of the natural landscape and having an adverse impact on plants and animals. When man's impact on nature was small

in scale, equilibrium was restored in the biosphere by natural means. When that impact is intensive, its adverse consequences have to be prevented and corrected by carrying out appropriate natural conservation measures, which presuppose ever larger expenditures of labor and funds, which have to be diverted from the sphere of actual production of physical goods. In just the years of the 10th Five-Year Plan outlays for natural conservation in the country amounted to about 26 billion rubles, including more than 10 billion rubles of centralized state capital investments.¹⁰

Fourth, while the growth rates of the industrial sector in the 11th Five-Year Plan are higher than the rates of its growth in the 10th Five-Year Plan, provision has been made for a sharp reduction in the growth rates of capital investments and labor resources. The growth of industrial output in the 11th Five-Year Plan is projected at 26-28 percent, instead of the 24 percent in the 10th Five-Year Plan, and the growth of capital investments 12-15 percent instead of 29 percent, respectively. The plans call for 85-90 percent of the growth of the national income in the 11th Five-Year Plan to be accomplished by raising labor productivity, instead of the 75 percent in the 10th Five-Year Plan. The figures in Table 1 allow one to judge the relationship between the growth rates of the national income and capital investments.

Table 1. Relationship Between the Growth Rates of the National Income and Capital Investments in the Years of the 8th, 9th, 10th and 11th Five-Year Plans

<u>Periods</u>	<u>Growth Over Previous 5-Year Period, in %</u>	
	<u>National Income</u>	<u>Capital Investments</u>
1966-1970	41	43
1971-1975	32	42
1976-1980	21	29
1981-1985 (plan)	18-20	12-15

Source: "Materialy XXV s"yezda KPSS" [Materials of the 25th CPSU Congress], Moscow, 1976, p 112; "Materialy XXVI s"yezda KPSS," Moscow, 1981, pp 99-100, 103.

It is evident from the table that in all the previous 5-year periods the actual growth rates of capital investments exceeded the growth rates of the national income. In the 11th Five-Year Plan plans call for the inverse relationship: the growth of national income is to be considerably higher than the growth of capital investments.

Fifth, it is a fundamental peculiarity of the 11th Five-Year Plan that the growth rates of Group B of industry are planned higher than the growth rates of Group A. Given the overall 26-28-percent growth of industrial output at the 11th Five-Year Plan, the growth of the means of production is planned at 26-28 percent and that of consumer goods at 27-29 percent.

The relationship between the growth rates of Departments I and II of social production is also taking on theoretical and practical relevance. The goal of

socialist production is directly realized in the growth of the output of Department II, including an increase in the output of the branches of Group B within the industrial sector. But production in Department I serves only as a means of furnishing the material conditions for increasing the production of goods which are not to be consumed in subsequent production. At the same time, the entire history of our economy's development, beginning with the first years of the country's industrialization and up until recently, was characterized with rare exceptions by higher rates of production of Group A, which brought about the faster development of the production of the means of production. This brought about a situation in economic theory in which the existing relationship between the growth rates of Departments I and II was elevated to a mandatory condition of expanded reproduction. But the entire set of factors in expanded reproduction do not affect this relationship equally. Some of them bring about a faster growth of the production of the means of production, while others on the contrary promote a convergence of the growth rates of the two departments. Factors making it necessary for the growth of the production of the means of production to be faster include the following: high growth rates of production based on a high rate of productive accumulation; an inadequate level of development of certain industrial means of production and insufficient economy in their use; forcing the rise of the capital labor ratio; and predominance of extensive forms of expanded reproduction over intensive forms. The factors promoting convergence of the growth rates of Departments I and II include: economy in consumption of the means of production; rise of labor productivity; development of the production of the economically most efficient types of technology; growth of production of agricultural output; a rise in the share of durable consumer goods and housewares in the total volume of production of consumer goods.

The relationship between the growth rates of Departments I and II will vary as a function of the relationship among these factors. "In determining the relationship between the growth rates of the two departments," L. I. Brezhnev said in the report address to the 24th CPSU Congress, "the party, as Lenin indeed taught, takes as its point of departure the specific needs and real capabilities of every individual stage."¹¹

The ratio of the growth rates of Group A to the growth rates of Group B in a particular period can be used as a coefficient in quantitative description of the relationship between the growth of production of Group A and that of Group B (see Table 2).

Thus in the postwar period production grew at approximately equal rates in both groups in the 1966-1970 and 1976-1979 periods. As for the coefficient in the 1946-1950 period, it showed a higher level for the growth rates of Group B. The reason for this is that in 1946, the first year after the war, the growth rates of Group B were substantially higher; in that year the coefficient was below unity (0.646), while in the subsequent years of that 5-year period it was quite high (in 1949, for example, it was 1.157). In the prewar period that coefficient had its highest value in the 1929-1931 period (average 1.176), and its lowest value in the 1936-1938 period (average 0.999). The fast growth of the sectors in Group B in the 11th Five-Year Plan is becoming a task of paramount economic and political importance.

Table 2. Average Annual Coefficients of the Faster Growth Rate of Group A Than Group B by 5-Year Periods

<u>Periods</u>	<u>Average Coefficient of Faster Growth Rate of Group A Relative to Group B</u>
1946-1950	0.995
1951-1955	1.016
1956-1960	1.026
1961-1965	1.032
1966-1970	1.002
1971-1975	1.012
1976-1979	1.009

Sources: "Narodnoye khozyaystvo SSSR 1922-1972. Yubileyny stat. yezhegodnik" [USSR National Economy 1922-1972. Anniversary Statistical Yearbook], Moscow, 1972, pp 127-128; "Narodnoye khozyaystvo SSSR za 60 let. Yubileyny stat. yezhegodnik" [USSR National Economy Over Its 60 Years' History. Anniversary Statistical Yearbook], Moscow, 1977, p 168; "Narodnoye khozyaystvo SSSR v 1979 g." [USSR National Economy in 1979], Moscow, 1980, p 143.

Sixth, it is a peculiarity of economic development in the 11th Five-Year Plan that in this period the share of the consumption fund in the national income is to be increased. Whereas in 1980 75.3 percent were set aside for those purposes, the figure in 1985 is set at 77.3 percent. The share of the accumulation fund is decreasing correspondingly.

Taking into account the existence of the country's mighty economic and scientific-technical potential and also the particular conditions of economic development in the eighties, the 26th CPSU Congress set as the main task of the 11th Five-Year Plan achievement of a further rise in the prosperity of the Soviet people on the basis of stable and gradual economic development, a stepping up of scientific-technical progress and conversion of the economy to the intensive strategy of development, more optimum use of the country's productive potential, and full-fledged conservation of all types of resources and improvement of the quality of work.

Only a rise of production efficiency can guarantee a further rise of people's prosperity and creation of the best conditions for comprehensive development of all members of society. That is why, as noted in the report address at the 26th CPSU Congress, the main problem of economic development in the 11th Five-Year Plan is to complete the transition to the predominantly intensive strategy of development. Raising production efficiency is the principal basis of contemporary economic development. In his address at the 26th CPSU Congress N. A. Tikhonov said: "In its historic scale, importance and consequences the transition of our economy being accomplished toward intensive development can rightly be placed in the same rank with such a profound transformation as socialist industrialization, which has radically altered the country's appearance."¹²

The congress outlined a program for raising the prosperity of the people which encompasses all aspects of work and rest, culture and everyday life of the workers. Particular attention is being paid in this connection to the commodity coverage of growing personal income, since deferred demand in the form of balances in savings accounts amounted to 146.2 billion rubles even in 1979, which is equal to 62.1 percent of the annual remuneration fund and 45.2 percent of the entire consumption fund.¹³ Plans call for strengthening the role of remuneration as an incentive and for the rise of labor productivity to exceed the rise of remuneration. The average monthly wage of workers and employees will rise 13-16 percent, and remuneration of kolkhoz members 20-22 percent. The output of agriculture is the material basis of the commodity coverage of personal income; its share, both directly and through its industrial processing, is between two-thirds and three-fourths of the entire consumption fund. As for durable consumer goods and housewares, they are produced not only by enterprises in Group B of the industrial sector, but also by industries of heavy industry, which manufacture half of all the goods in this group.

The development of heavy industry is a prerequisite for performing all the tasks of the national economy. This especially applies to its basic sectors--the fuel and power industry, metallurgy, machinebuilding, the chemical industry, transportation and construction. The role of fuel and power, metallurgical and other extractive sectors stands out within the system of those sectors. It has to be taken into account that the problem of raw materials and energy is not only a national one, but also a global one, a worldwide problem. The extraction and consumption of raw minerals and fuel are increasing at progressively higher rates. For instance, in 1979 petroleum production (including gas condensate) in the USSR alone exceeded by more than twofold the level of its world production in 1940.¹⁴ The nonrenewability and limited nature of reserves of minerals and fuel make it a necessity to use them economically, to recover the by-products of manufacturing operations, to intensify the working of the deposits, and to explore for new sources and types of raw materials and energy. Technical progress guarantees a reduction of specific rates of consumption of fuel, raw materials and supplies per unit of the finished product. For instance, the specific rate of consumption of standard fuel at power stations in the public system per kilowatt-hour of electric power delivered from station busbars dropped from 645 grams in 1940 to 415 grams in 1965 and to 330 grams in 1979.¹⁵ On the average the materials intensiveness of industrial output has been dropping 0.5-0.6 percent annually. At the same time the share of material costs in the value of output is increasing, which is explained by the considerable rise in the cost of extracting and shipping fuel, raw materials and supplies.

Under these conditions it is becoming very urgent to improve the proportional pattern of the fuel and power balance by reducing the share of petroleum as a fuel and replacing it with gas and coal and through rapid development of nuclear power. The rapid growth of petroleum and gas extraction in Western Siberia and their shipment to the country's European part are very important components of the fuel and energy program. In metallurgy the principal task is to reduce losses and waste by expanding the assortment and improving the quality of rolled products and by refining technology in metal manufacturing.

Reduction of the energy intensiveness and materials intensiveness of the end product is a most important way to intensify production and to increase its efficiency.

Improved utilization of production capacities (machines, machinery and transportation equipment) and of capital investments is opening up large opportunities for the transition to the intensive strategy of economic development. The principal ways of improving utilization of fixed capital are to increase the technical-and-economic characteristics of equipment, to improve the makeup of equipment, to bring the number of job slots into line with the availability of labor resources, and to improve the indicators of extensive and intensive utilization. One peculiarity in utilization of capital investments in the 11th Five-Year Plan is that they will be predominantly committed to reconstruction of existing enterprises.

The intensive type of reproduction presupposes fuller and more optimum utilization of labor resources. The role of the human factor is increasing sharply in the context of the scientific-technical revolution, which makes it more important to improve the composition of the work force with respect to occupations and skills and to improve the planning and training of skilled workers and specialists.

Scientific-technical progress, whose acceleration requires improved planning of science and application to production of scientific discoveries and inventions and improvement of product quality, is the basis for the economy's transition to the intensive strategy of development.

The task of supplying food and industrial goods is being advanced to the foreground in order to raise the standard of living of the workers. Solving this problem once and for all made it necessary to draft a specific food program in which all the stages and components related to production and processing of agricultural products are working in a coordinated and synchronized way. The basis of that agroindustrial complex is agriculture itself, i.e., the growing of plants and animal husbandry. Livestock raising, which is the shock front in rural areas, faces especially difficult tasks. The agroindustrial complex, including agriculture, will as in the past receive large amounts; during the 11th Five-Year Plan the capital investments of the entire agroindustrial complex will comprise one-third of all capital investments in all sectors of the economy, and investments in agriculture itself will represent 27 percent of that figure. But the main problem once again is increasing efficiency and the quality of work.

Improvement of the methods of guiding the economy occupies an important place in the system of measures to convert the economy to the intensive strategy of development. Strengthening discipline, enhancing personal accountability for fulfillment of state plans, overcoming lack of coordination in the actions of different departments, extensive use of target-program methods of planning and management, expansion of the independence of associations, improvement of organizational and managerial relations--all of this will promote the effort to align the economic mechanism with the peculiarities of present-day economic development and with solving the basic tasks set by the 26th CPSU Congress.

FOOTNOTES

1. "Materialy XXVI s"yezda KPSS" [Materials of the 26th CPSU Congress], Moscow, 1981, p 31.
2. Ibid., pp 31-32.
3. Ibid., p 32.
4. Ibid., p 32; PRAVDA, 14 January 1981.
5. "Narodnoye khozyaystvo SSSR v 1980 g.," Moscow, 1981, p 369.
6. "Materialy XXVI s"yezda KPSS," p 33.
7. EKONOMICHESKAYA GAZETA, No 8, 1977, p 10; IZVESTIYA, 3 July 1981.
8. PRAVDA, 27 March 1981.
9. Kirichenko, V., "The Proportionality of Economic Growth and Efficiency," KOMMUNIST, No 18, 1980, pp 31-32.
10. IZVESTIYA, 7 February 1981.
11. "Materialy XXIV s"yezda KPSS" [Materials of the 24th CPSU Congress], Moscow, 1971, p 45.
12. "Materialy XXVI s"yezda KPSS," p 107.
13. "Narodnoye khozyaystvo SSSR v 1979 g.," pp 285, 387, 394, 406, 435.
14. Ibid., pp 76, 91.
15. Ibid., p 169.

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ECONOMIC POLICY, ORGANIZATION AND MANAGEMENT

USSR CSA PLAN OF STATISTICAL, METHODOLOGICAL WORK FOR 1982

Moscow VESTNIK STATISTIKI in Russian No 3, Mar 82 pp 3-13

[Article by I. Matyukha]

[Text] For state statistical organs, 1982 will mark a new stage in further all-out improvement of quality and efficiency of accounting and statistics, perfecting of accounting documentation and reporting in all parts of the national economy in terms of the modern requirements of administration, planning and analysis of economic activity with effective utilization of electronic computing equipment. The solution of the indicated important tasks is the goal of the plan of statistical and methodological work for 1982, worked out in conformity with the measures of the USSR Central Statistical Administration for further improvement of state statistics stemming from the decisions of the 26th CPSU Congress and the report of General Secretary of the CPSU Central Committee Comrade L.I. Brezhnev at the congress.

The statistical work plan provides for systematic observation of progress in the fulfillment of the State Plan of Economic and Social Development of the USSR for 1981-1985 and the plan for 1982, essentially approved by the November (1981) Plenum of the CPSU Central Committee and comprehensively discussed and ratified by the sixth session of the 10th convocation of the USSR Supreme Soviet. Broken down by the years of the five-year period and by ministries, departments and union republics, the five-year plan assumed the force of a state law.

In the light of the decisions of the 26th CPSU Congress, one of the chief tasks of state statistical organs in 1982 lies in timely and full provision of supervisory, planning and economic organs at all levels of operation with scientifically based data on the development of socialist economy and culture. With the development and introduction of national-economic special-goal programs, major and responsible tasks are to be solved on the basis of statistical research of the development of food and energy programs and long-term programs of mechanization and automation of materials-handling, loading-unloading and warehouse work, development of transport and economic development of the Baykal-Amur Main Line zone and so forth.

Statistical reporting materials of enterprises, organizations and institutions, data of special records, listings and a number of selective surveys and calculations provided by the statistical work plan assure: first, comprehensive

economic analysis of the solution of the chief task of the five-year plan of ensuring the further growth of the well-being of the Soviet people on the basis of a stable and progressive growth of the economy; second, analysis of the growth of the country's economic potential, the rise of the effectiveness of the national economy and its sectors, intensification of production, acceleration of scientific-technical progress, growth of labor productivity in all parts of the national economy and increased output and higher quality of production.

In the plan of work, major attention is paid to the continuing solution of the tasks set before statistical organs and ensuing from the decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979 "On Improving Planning and Increasing the Influence of the Economic Mechanism on Raising Efficiency of Production and Quality of Work." On the basis of reports examined by statistical organs in 1980 and 1981 and the changes and additions introduced into them in accordance with the aforesaid decree, the statistical work plan, with the further introduction of new indicators into the operational activity of ministries, associations, enterprises and organizations, provides a collection of information required for assessing the results of their activity under the conditions of improvement of the economic mechanism.

One of the chief places in the plan has been assigned to statistics of technical progress. For the purpose of deeper economic analysis of acceleration of scientific-technical progress, statistical investigation of fulfillment of plan targets for the most important directions of development of science and technology is being deepened as a decisive factor in the transition of the economy to the path of intensive development. Statistical materials are being collected and analyzed on the fulfillment of targets of programs relating to the solution of scientific-technical problems, including special-goal complex scientific-technical programs developed and approved by Gosplan USSR, the USSR State Committee for Science and Technology and the USSR Academy of Sciences whose end goal is the introduction of the most effective scientific-technical achievements.

Among the work being done on statistics of technical progress, mention should be made of development of new reporting, the materials of which will make it possible to characterize more penetratingly fulfillment of the plan of removing from production obsolete designs of machines, equipment, instruments and items as well as other types of products and the replacement of backward production processes for a number of ministries and departments as well as individual enterprises. Such plans, together with systematically developed reporting data on the fulfillment of plans of development of new types of manufactured products and the introduction of progressive production processes, are of significant value for analysis of fulfillment of targets for technical progress within the framework of national-economic sectors and various production operations.

Work is continuing in 1982 on the development and analysis of statistical data on the results of the operation of scientific-research and design organizations.

In the light of the decisions of the 26th CPSU Congress, major importance in statistics of technical progress is being attached to the following work: on

observation of mechanization of labor-intensive and heavy work in a number of sectors of industry and in construction, of mechanization of materials-handling work; on analysis of the number of workers engaged in loading-unloading, materials-handling, transport and warehouse work with their distribution on the basis of mechanization of labor within the framework of ministries and departments. Reporting has been improved in regard to indicators of economic effect from the implementation of scientific-technical measures. Reporting contains both planned and actual indicators of profit growth, including because of economy from reduction of production cost as well as indicators of the national-economic effect from the introduction of scientific-technical measures.

A considerable volume of analytical information on plan fulfillment for a number of basic indicators of technical progress stipulated by the decree of 12 July 1979 will come from special annual reporting worked out within the framework of republics, oblasts, krays, ministries and departments.

The plan for 1982 contains a broad complex of work on statistical monitoring of the development of sectors of material production--progress in the fulfillment of plan targets in industry, agriculture, capital construction, transport and other sectors of the national economy. In the development of this part of the plan, they proceeded first of all from the necessity of providing systematic analysis of statistical data on the development of sectors of heavy industry (fuel-power, metallurgy, chemistry, machine building and others), the structure of the fuel and power balance, economy of all types of fuel and the development of atomic energy. Subsequently they intend to expand statistical monitoring of the accelerated growth of group B products.

In capital-construction statistics, special attention is paid to developing reporting for characterizing concentration of resources that provide rapid start-up of fixed capital and production capacities, complex reequipment and modernization of existing enterprises in the national economy. Analysis is being expanded of growth of the country's transport system and upgrading of its efficiency for the purpose of fuller satisfaction of the needs of the national economy with respect to freight transportation. All-out development has been provided of economic analysis of statistical data on the material-technical base and the efficiency of the country's agroindustrial complex and interrelation and proportional development of its sectors as one of the basic conditions of improving the material well-being of the population.

An important place in the statistical work plan of the USSR Central Statistical Administration for 1982 is occupied by questions of further improvement of reporting and its development for the purpose of analysis of employed new indicators and economic norms in connection with improvement of planning and increasing the influence of the economic mechanism on raising efficiency of production and quality of work in industry.

Reporting materials permit systematic analysis of the work of industrial ministries that have been fully converted to planning and evaluation of work on the basis of the indicator of normative net production. At the same time, reporting is being developed for the indicator of normative net production and for

other indicators for the production associations and enterprises of those ministries and department where only a portion of the associations and enterprises has been converted to these indicators.

In 1982, targets for volume of industrial production for the USSR, union republics, a number of ministries as well as in the sectorial context were set according to the volume of sales and commodity production and for 14 industrial ministries--on the basis of normative net production. The decree of 12 July 1979 also provides for individual sectors and production operations with account being taken of their special features, especially for the extractive sectors and sectors processing agricultural raw materials to establish other indicators that reflect more accurately dynamics of production, the rise of its efficiency and growth of labor productivity. Under these conditions, reporting for industry contains value indicators of normative net, commodity and sold production, making it possible to evaluate fulfillment of plan targets for each ministry on the basis of indicators established for it and assurance of control over the fulfillment of plans within the territorial framework.

It should, however, be pointed out that assessment of the work of industrial enterprises at the present time, under conditions of use of different indicators, presents a number of complex methodological problems, particularly the question of consolidated indicators of the operation of industry in the territorial framework.

Of significant importance is the development of reporting characterizing the total volume of sold products and the size of this production with account being taken of fulfillment of commitments for deliveries of products of production designation and consumer goods according to a products list and assortment in conformity with concluded contracts for industry as a whole and for union republics, ministries and departments.

Major attention is being paid to the production of industrial products in physical terms on the basis of a more comprehensive products list. As last year, reporting makes it possible to analyze in detail data on the production of consumer goods (group B products), worked out for union republics and individual ministries. In this connection, prominence is given to the development and analysis of data on the production and delivery of goods of primary need and mass demand as well as goods of children's assortment.

A very important task of industrial statistics is study of product quality, expansion of assortment, increase of production of new kinds of products meeting present-day requirements. Consequently, major importance is to be attached to analysis of the influence of indicators of production quality on the results of the economic activity of associations and enterprises as well as analysis of the share of products of the highest category of quality designated in plans of economic and social development of ministries, associations and enterprises. In this connection, the products list of the considered production has come to include in addition progressive and economic forms of metal products, powder-metallurgy and industrial robot made items and others.

Problems of quality and efficiency are closely connected with statistical study of the use and development of progressive production processes and production operations and with the production as a result of this of new kinds of products and evaluation of the economic effect from implementation of scientific-technical measures.

Industrial reporting permits analysis of labor indicators in this sector: the size of industrial-production personnel, change in the number of workers and utilization of worktime, introduction of scientific labor organizations, labor productivity and others. Indicators are developed characterizing observance of the limit on the number of workers and employees and wage norms per ruble of production for ministries for which they are established.

In the light of the decisions of the 26th CPSU Congress, the plan provides for the collection and elaboration of diverse information for analysis of the use of industrial fixed capital and production capacities, their renewal and upgrading of the technical development, adoption of designed indicators of newly operating enterprises and facilities as well as disclosure of existing reserves in the use of equipment and production capacities for the purpose of fulfillment and overfulfillment of plan targets.

The broad range of reporting indicators provides the possibility of evaluating the results of economic activity in industry--sizes of profit and its distribution, profitability of production, establishment of economic-incentive funds and others. Under conditions of a higher role of production cost in the system of indicators of planning and economic stimulation, development and analysis of the level and dynamics of production cost and progress in the fulfillment of plan targets for this indicator are being increased.

Carrying out of a number of selective surveys and calculations will contribute in significant degree to increased economic analysis of the operation of industry in 1982.

The work plan for statistics of capital construction provides for the observation and development according to union republics, ministries and departments of indicators provided by the above-mentioned decree of start-up of fixed capital, production capacities and facilities, including growth of capacities through reequipment and modernization of existing enterprises as well as for adherence to the limit of state capital investment and construction-installation work. On the basis of reports of contracting construction organizations, there is developed and analyzed the indicator of volume of commodity construction production, characterizing the cost of construction-installation work performed at priority complexes and construction projects turned over to the ordering party, fully ready for producing output and rendering services. This indicator is developed on the basis of pertinent reporting of the ordering parties.

As a result of elaboration of reporting materials, diverse information will be obtained for evaluating fulfillment progress of plan targets for housing construction and start-up of facilities of cultural and consumer designation.

As in last year's plan, a considerable amount of work will be performed in monitoring construction progress in the regions of Siberia and the Far East and the RSFSR Nonchernozem Zone and on the formation of regional production complexes.

Special significance is presented by statistical monitoring in our country of the implementation of the coordinated construction program of the CEMA member-nations on an integrated basis and progress of construction work performed with firms of a number of capitalist countries on a compensation basis.

The plan provides for expanded development of reporting and also of materials of a number of one time only surveys for the purpose of a comprehensive analysis of indicators of effectiveness of capital investment as one of the most important conditions of progressive development of all sectors of the national economy. These are indicators of time periods of designing and construction of facilities, directions of capital investment (new construction, modernization of existing enterprises), their production structure, their specific capital investment, their reimbursement and so on.

The study of factors is planned curtailing unfinished construction, formation of a sectorial structure of capital investment for the purpose of improvement of national-economic proportions and strengthening the production and technical base of construction organizations.

Agricultural statistics have been further developed in the 1982 plan. Reporting data and a number of surveys on special programs and supplementary developments of reporting materials make it possible comprehensively to analyze questions of agricultural production as the chief link of the entire agroindustrial complex of the country, development of new forms of organization and management in the sector, specialization and concentration of production and its intensification.

The development of operative reporting on the course of sowing and harvesting work throughout the year will be continued. Data will be elaborated of annual reports of kolkhozes, sovkhoses and interfarm enterprises on plant-growing production in 1981 and data on the actual harvest taken in in 1982. Analysis of the development of plant growing will require elaboration of reporting data on sown areas of agricultural crops for republics, krays, oblasts, economic regions, the RSFSR Nonchernozem Zone and categories of farms.

Analysis of the data on the development of production will be helped by the materials of new selective surveys of purchases of agricultural products at kolkhozes and sovkhoses on the basis of direct ties, utilization of agricultural equipment on farms in harvesting of crops and so on.

No less important work is outlined by the plan in the field of statistical study of the development of animal husbandry. This is first of all a record of livestock at all categories of farms as of 1 January 1982, systematic elaboration throughout the year of monthly reporting data on the state of animal husbandry at kolkhozes, sovkhoses and interfarm enterprises as well as the elaboration of data on animal-husbandry production in physical indicators.

As in prior years, balances will be worked out of crop production and of animal-husbandry products on producer-farms, which serve as the most important source of a number of data for the construction of a production balance of the public agricultural product.

In connection with the further improvement of planning and economic stimulation of agricultural development, statistical reporting and the manner of its elaboration on the basis of purchases of agricultural products have been improved for the purpose of systematic analysis of fulfillment of plan targets for its corresponding forms. The plan provides for the elaboration of a number of current and annual reports of kolkhozes, sovkhoses and interfarm enterprises for analysis of the results of their economic activity, the presence, condition and utilization of agricultural equipment, mechanization of basic operations in farming and animal husbandry, introduction of scientific labor organization, utilization of fixed capital and production capacities, the number of personnel and size of pay and efficiency of agricultural production and quality of products. For this end, major attention is being paid to the elaboration of materials on products on the basis of a number of social-economic signs for producer-farms' production.

Monitoring of the plan indicators of production of all forms of transport is done on the basis of reporting data of transport and communications statistics. The reporting of corresponding ministries makes it possible to analyze monthly fulfillment of plan targets for the freight turnover of railroad, maritime, river, motor, air and pipeline forms of transport. Such data are correspondingly elaborated not only for the country as a whole but also for individual railroads, state associations and steamship lines, ministries and departments, basin administrations and the like. For a thorough assessment of transport work efficiency, indicators are studied of average daily freight loading, hauls of freight and passengers, pool of transport equipment and utilization of rolling stock by railroad transport, the existence and use of vessels of the maritime and river fleets, aircraft and trucks as well as indicators of freight delivery times, regional freight traffic volume, cost of shipments and labor productivity in shipments, introduction of scientific labor organization of workers, engineering and technical personnel and employees in transport and the like.

The fulfillment of planned communications targets is likewise analyzed. In addition to assessment of the progress of plan fulfillment for production volume, data are studied on the development of the network and operational activity of enterprises in the field of mail, telegraph and telephone communication, radio broadcasting and television and the quality of their operation.

A considerable volume of information on the operation of transport and communications in 1982 will be produced as the result of elaboration of the materials of annual reports of pertinent enterprises and organizations and selective surveys.

A number of new and important tasks are being solved in 1982 with the statistics of material-technical supply, which are intended to perform constant

monitoring of fulfillment of plan targets for supply and utilization of raw and other material resources in the national economy. Deliveries of a number of types of manufactured products to agriculture are especially selected.

The above-mentioned information is worked out for the most important users of the products--ministries, departments, union republics as well as for the territory of the Western Siberian Petroleum-Gas Complex, while taking into consideration its national-economic importance in the development of the country's economy.

Significant attention is paid in the plan to the realization of tasks for organs of state statistics stemming from the decree of the CPSU Central Committee and the USSR Council of Ministers "On Intensifying Work on Economy and Rational Utilization of Raw-Material, Fuel-Power and Other Material Resources" adopted in June 1981, which is a mobilizing document in the solution of problems of boosting efficiency in development of the economy. For this end, a system has been improved of indicators of reporting for analysis of the existence and use of fuel and power resources, fulfillment of norms and targets according to average reduction of norms of expenditure of raw and other materials, fuel, thermal energy and electric power, actual expenditures of materials and products for production output, expenditure of fuel for individual types of manufactured products and fulfillment of operations, formation and utilization of fuel and thermal secondary energy resources developed according to ministries and departments. Data on economy of materials in construction are also being worked out within the framework of construction ministries.

For a more penetrating analysis of problems of distribution of means of production in the national economy in 1982, there will be worked out a number of balances of the most important forms of industrial products and among them balances of ferrous and nonferrous metals, machinery and equipment, chemicals and industrial rubber products, construction materials, coal and petroleum products as well as the fuel-power balance for 1981. Extremely important information is provided by the results of listings of remains of ferrous and nonferrous metals, a number of materials and products, availability of petroleum and gas condensate, uninstalled equipment and the like as of 1 January 1982, a tally of available tractors and individual machines and equipment as of 1 June 1982. Like last year, an elaboration will be carried out on data of annual reports on the economic activity of supply and sale organizations for a comprehensive analysis of use of the fixed capital of these organizations, calculations and analysis of gross and net production, formation and expenditure of the resources of funds of economic stimulation and so forth.

The plan for the section on statistics of natural resources and the environment will provide systematic monitoring of progress of fulfillment of targets in this field. Reporting is being developed on performance of geological prospecting work for different types of minerals and their use. In addition to this, special reporting will describe accomplishment of measures for the rational utilization and protection of water resources, construction of water-protection facilities and curtailment of discarding of contaminated waste water in rivers and other water bodies of the basins of the Black, Azov, Baltic and Caspian seas. Major attention is devoted to reporting for monitoring the

fulfillment of plan targets for trapping harmful substances from stationary sources of pollution, protection of free air and utilization of mineral water, correspondingly developed by ministries and departments, union republics and economic regions of the country. Data on outlays for nature-protection measures are worked out on the basis of annual reporting data.

The 1982 plan provides for the elaboration of different information on statistics of finances and prices. This first of all includes reporting data of finance organs on progress in the fulfillment of plans for finance-credit institutions--the country's State Budget for items of receipts and expenditures, credit and accounts operations of Gosbank USSR and Stroybank USSR, operations of the USSR State Labor Savings Bank and the USSR Main Administration of State Insurance.

In economic analysis of progress in fulfillment of the State Plan of Economic and Social Development of the USSR for 1982 and analysis of the efficiency of public production, a particularly important role belongs to data coming from bookkeeping and statistical reporting on fulfillment of the profit plan and worked out according to types of economic activity for union republics, ministries and departments as well as for indicators of profitability, the status of own working capital, above-norm remains of commodity and physical assets, sources of formation of economic-incentive funds and their movement.

Statistical monitoring is planned of the level and structure of wholesale prices in industry, computation of the indexes of these prices, study of the structure of retail prices for basic consumer goods. For the purpose of determining the influence of the new wholesale prices and rates introduced as of 1 January 1982 on changes in production cost, profit and profitability in industry as well as in other sectors of the national economy in 1982, economic analysis will be continued of the results of a one-time only recording of the change in the cost of products supplied in 1980 to ministries and departments, that is an estimation of their cost in old and new prices.

A number of new statistical observations and developments have been added to sections of the plan, casting light on progress in the fulfillment of targets in the field of social development, raising of the material and cultural living standard of the population and further development of the socialist way of life. Among them, important national-economic significance is to be attached to work on statistics of labor and wages. Under conditions of further improvement of the economic mechanism special importance is shared by reporting data on the fulfillment of plan (limit) of the number of workers and employees and the wage fund worked out for ministries and departments, enterprises and institutions under the jurisdiction of local soviets as well as for republics, krays and oblasts. Balance work in the field of labor statistics is being expanded and improved. In 1982 the balance of labor resources will be calculated on the average for 1981 for the country as a whole and for republics, krays, oblasts and economic regions with distribution of its indicators by city and rural localities as well as the calculation of the balance of labor resources for city-capitals of republics, krays and oblast centers. Reporting balances will be used in improvement and raising of the quality of development of

planned balances of labor resources in the territorial context as provided by the decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979.

Considerable attention is devoted in the plan to the development of reporting data for analysis of job placement of the population, acceptance and removal of the work force and utilization of worktime, training of skilled cadres in schools of the system of the USSR State Committee for Vocational and Technical Education and training and upgrading of qualifications of workers and employees at their place of work as well as organized recruitment of workers for industry, construction, transport and other sectors of the national economy.

For a deeper analysis of labor data, it is planned in 1982 to conduct a number of one-time calculations: of the number of personnel in the administrative apparatus with distribution of those working according to occupied positions, of the number of workers by vocations, grade categories, forms and systems of pay and the like, the data of which will be correspondingly worked out by ministries and departments, sectors of the national economy and regions of the country. Computations will be made of the number of basic and auxiliary workers in industry and of the number of workers whose labor will be subjected to first-priority mechanization (as of 1 August 1982). These materials are extremely necessary for the solution of practical problems relating to the use of labor resources.

In the field of social development and monitoring of progress in the fulfillment of pertinent targets, there should be pointed out in the plan work on statistics of public education and culture. Data will be elaborated on the basis of annual reporting on the network of different types of schools, kindergartens and nurseries, the scope of inclusion by these institutions of pertinent groups of the population and availability of cadres of pedagogs and educators and progress of pupils. A considerable volume of work will be done in connection with the development of reporting on network, acceptance and leaving of pupils by VUZ's and tekhnikums for the start of the 1982/83 school year as a whole for all forms of instruction as well as individually for day, evening and correspondence education. There will be worked out and analyzed reporting on the network of scientific institutions and the number and composition of scientific personnel and the network and operation of cultural and educational institutions. In 1982, it is planned to conduct on the basis of an expanded program accounting of people's amateur theaters and musical collectives.

In 1982, it is planned to carry out a series of important works on population, health-care and social-security statistics. Counts are continuing of the size of the population for the country as a whole and for republics, krays and oblasts and of the city and rural population as well as the size of the population of working age, which are used in the working out of the balance of labor resources. Systematic reporting provides for analysis of the natural movement of the population, that is, birthrate, mortality, growth of population size and its migration. A considerable amount of work is being done on elaboration and analysis of reporting, the data of which describe matters of health care and social security of the population, which are required for controlling the progress of fulfillment of the corresponding plan targets.

Periodical and annual reporting on the basis of statistics of housing, municipal and consumer services provides the possibility of carrying out systematic monitoring of progress in the fulfillment of plan targets relating to the aforesaid questions. Data are elaborated on progress in fulfillment of plans of sale of consumer services to the population as a whole and according to its form, capital repair of state housing resources, operation of trolleybus and trolley services and of the subway. Consolidated reports make it possible to analyze data on housing resources in urban and rural localities. A survey is to be organized of the quality of consumer services for the population and conditions of work of consumer enterprises and organizations.

Trade statistics occupy an important place in the system of indicators of the material well-being of the population. The reporting data, worked out for the country as a whole and for the union republics, characterize commodity circulation--delivery of basic food and nonfood products for the markets through the means of state resources, stocks of these goods and their sale to the population. The plan provides detailed working out of reports for the monitoring of progress in the fulfillment of plan targets for growth of the volume of retail trade turnover of state and cooperative trade in 1982. For the purpose of deeper analysis of the data, indexes are computed of retail prices for a number of goods as well as a general index of retail prices of state, cooperative and kolkhoz trade.

As in former years, elaboration is being done of the balances of basic food and nonfood products for analysis of the sources of formation of commodity resources and their utilization. Development is proposed of special reporting on the network of trade and public-dining enterprises and the results of their economic activity.

A considerable amount of information on the living standard of various social groups of the population and types of families depending on their composition, employment, income level and other social-economic indications will be obtained in 1982 from materials of selective surveys of the family budgets of workers, employees and kolkhoz farmers.

In 1982, the plan provides for performance of work on statistics of foreign countries. It will include work on generalization and analysis of data on foreign trade--the export and import of a number of goods, fulfillment of plans of economic and technical cooperation with foreign countries, systematization of numerous statistical data on the economic development of socialist and capitalist countries.

A comprehensive elaboration of statistical materials by sectors of the national economy will be provided by the completion of a number of large works on the balance of the national economy whose materials will make it possible to analyze the developmental level of a country's economy, the scale and rate of expanded reproduction, basic national-economic proportions and to characterize progress in the fulfillment of the State Plan of Economic and Social Development of the USSR for 1981-1985 for a number of its generalizing indicators.

In 1982, balances will be worked out: of production, consumption and accumulation of the social products; of production, distribution, redistribution and utilization of the national income; of fixed capital in the national economy and the like. For 1981, there will be developed on the basis of a short program a report of intersectorial balance of production and distribution of production in cost terms (for the basic sectors of the national economy and industry). The data of this balance will make it possible to study the sectorial structure of the social product and the basic proportions and connections among sectors formed in the reporting period as well as to analyze sectorial costs of production and its profitability, and to compute coefficients of direct, indirect and full material outlays of production of some sectors for its production in other sectors. Balances of monetary incomes and expenditures of the population will be studied, as well as the total volume of material benefits and services used by the population, their real incomes, etc.

Success in the fulfillment of the plan of statistical work will be abetted by the solution of a number of important methodological questions and the conduct of scientific researches by administrations and departments of the USSR Central Statistical Administration and the scientific-research institute of the USSR CSA. The most important of them are related to problems of improvement of reporting and accounting documentation in conformity with the new tasks of development of the economy at the present stage, implementation of measures for perfecting of the economic mechanism and intensification of work on the rational use of material resources.

It is planned to carry out a number of methodological studies, the chief tasks of which are improvement of the balance method in statistics, study of new social-economic phenomena and processes in society, development of integrated analysis of statistical data, improvement of the methodology of accounting of losses and nonproductive expenditures in sectors of material production. Improvements are being made in the methodology of monitoring progress in fulfillment of targets for rational utilization of material resources designated by special-goal complex scientific-technical programs; methodology of monitoring the accomplishment of the transport program. Methods are being developed of processing information for characterizing progress in the fulfillment of the food program; a methodology of counting the number of workers engaged in heavy physical labor and the like.

Considerable methodological work will be conducted in connection with plan fulfillment by the CEMA Permanent Commission for Cooperation in the Field of Statistics.

On the whole, it should be noted that fulfillment of the plan of statistical and methodological work solves the problem of timely and full providing of scientifically valid statistical data, characterizing the development of the socialist economy in 1982.

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INVESTMENT, PRICES, BUDGET AND FINANCE

BALANCED CONSUMER GOODS MARKET DEEMED ESSENTIAL

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[Article by N. V. Belokh, N. Ya. Petrakov and V. P. Rusakov: "Income, Supply and Prices: The Problem of Balance"]

[Text] The article contains a statement of the problem of balance and an analysis of the problem from the standpoint of the requirements of the economic laws of socialism. Particular attention is paid in the article to discovering the possibilities of using the prices of a planned equilibrium (sbalansirovannost') in the present stage of economic development.

In the present stage of economic development great importance is attributed to solving the problems arising in shaping and carrying out the program for the rise in the material and cultural level of living of the country's population, which in conformity with the basic economic laws of socialism is regarded as a reflection of the goal and final result of the functioning of a socialist economy. These problems are also advanced into the foreground in the "Basic Directions for the Economic and Social Development of the USSR Over the Period of 1981-1985 and Up to the Year 1990."

Shaping and carrying out the program for the rise of the prosperity of the country's population presupposes interdisciplinary study of the various aspects of this process. Recently the rise in the prosperity of the country's population has quite soundly been regarded as a factor for intensifying the growth of the socialist economy [18]. At the same time the process of discussing the category of the "prosperity of the population" has revealed the complexity and ramified nature of this category and the changeability of the structure of components making it up [11]. But the level of adequacy of physical goods and services of various socioeconomic groups of the population is always one of the principal characteristics of the prosperity of a country's population. It depends to a considerable degree on distribution of the entire volume of consumer goods, a large portion of which are sold on the market of consumer goods in the context of commodity-money relations.

The character of a study of this market depends in large part on the initial theoretical premises, i.e., on the conceptual model of the market. The divergence of the initial conceptual models results in differences in selection of the variables used in describing both the dynamic trajectories of development of the object under study as well as its static state. What we mean by the consumer goods market is the process whereby the aggregate producer sells goods at certain prices to a large number of consumers at a given distribution of money. In this definition of our terms of reference the balance between the demand and supply of consumer goods is one of the basic characteristics of the market.

There are a number of reasons why studies of the market in the socialist context differ essentially from analogous studies in the capitalist context. It is important to emphasize that the conscious and planned alteration of the proportions of socialist reproduction is one of the most important instruments for guaranteeing correspondence between the material goods needed by society and those it produces. Moreover, the purposive alteration of the basic proportions is not limited solely to physical relationships; it also includes the planned regulation of value proportions. This is a fundamental qualitative distinction between the market under socialism and the capitalist market. The essentially different connotation of market categories, above all the meaning of the price, also follows from this principle. Whereas under capitalism the price is a reflection of random processes in the formation of economic proportions, under socialism the price is one of the parameters in the management of an economic system that is organized in conformity through a plan.

From our point of view the basic requirement concerning the state of the consumer goods market is the requirement of balance between supply and demand. By balance we mean quantitative equality of the total volume and pattern of demand to the aggregate size and pattern of the supply of commodities. We will present a number of arguments to make the case for the necessity of equilibrium.

Carrying out the basic economic law of socialism, raising the degree of satisfaction of the material needs of the members of society, is directly related to increasing the efficiency of social production. It is well known that the material motivation of the workers serves as an effective factor in raising labor productivity and in increasing the operating efficiency of the entire economic system. The importance of material motivation is so great that V. I. Lenin elevated its use to the level of one of the basic principles for management of the economy [3, p 151].

But the effectiveness of the principle of material motivation depends in large part on the situation that takes shape on the consumer goods market. Imbalance or disequilibrium of supply and demand, scarcity of a number of goods, tend to undermine this motivation for raising labor productivity, since the consumer cannot altogether realize in conformity with the pattern of his demand the additional money income he obtains in the form of the financial incentive.

The operation of the basic law of socialism, which expresses the goal of the economic system's development, is related to the entire process of reproduction. The most important manifestation of its direct accomplishment is a rise in the material prosperity of all the members of socialist society. One of the most widespread indicators of material prosperity is the indicator of real personal income. But money income reflects the level of real income only insofar as it can be spent, and it is required not only that there be an overall correspondence between supply and demand, but also a correspondence between the pattern of demand and the makeup of the supply of commodities. Suppose money income doubles. If this growth of income is not backed by the necessary commodities, corresponding to the new size and pattern of demand, then there still will not be an increase in the real income of consumers. If the growth of income is only partially backed by the corresponding pattern of commodity supply, then real income will increase, but to a smaller proportion than nominal income.

We can thus state that the actual performance of the basic economic law of socialism (understood to mean the requirement of a rise in real personal income) results in the need to acknowledge that economic development should take place under the conditions of a balance between supply and demand.

Whereas the rise of the real income of the members of society is a requirement for carrying out the basic economic law of socialism viewed in static terms, in the dynamic context the operation of this law is manifested in the need to increase the efficiency of social production. That is why the requirement of planned equilibrium of supply and demand arises out of the need to implement that law not only in static terms, but also in dynamic terms.

The quality of the functioning of the finance and money mechanism is also closely bound up with the degree of equilibrium of the consumer goods market. If demand exceeds the available stocks of commodities, then money resources are withdrawn from economic circulation in the form of excessive savings, i.e., savings exceeding a certain normal level (the level of savings under the conditions of a balanced consumer goods market). This process inevitably leads toward accelerated issue of paper money, which in turn causes an unjustified growth of the amount of money in circulation.

If the size of demand lags behind the size of supply, then a substantial amount of unsold goods are frozen in the form of above-allowance trade inventories, which tends to slow down turnover. At the same time the turnover tax and certain other revenues of the state budget, because of the relatively redundant goods which have been produced and have gone through intermediate (wholesale) sale, create the appearance of a growth of financial resources, representing what is called fictitious money. As it flows into circulation, this money increases the amount of money in circulation. And since the noncash circulation of money and the cash circulation can be referred to (with a certain degree of qualification) communicating vessels [5, p 144], the fictitious money that comes into being because demand is lagging behind supply exerts definite pressure on the consumer goods market.

Aside from the fact that material goods are eliminated from economic circulation when a portion of commodities cannot be sold normally, this situation results in direct losses for society. This is mainly related to two factors: first of all, to the commodities' loss of a portion of their value during storage (both physical wear and obsolescence), and second, to the higher material, labor, and financial costs of storing above-allowance inventories.

When there is a structural disequilibrium between demand and supply because of the slack transfer of excessive demand from certain goods to others, the most realistic situation is that in which both of the cases described above occur, with all the adverse consequences for the economy that derive therefrom.

At the same time, the situation of disequilibrium between supply and demand tends to disrupt the law of distribution according to work, which can be regarded as the basic principle governing distribution of goods under socialism. This principle is manifested in two aspects--in physical terms and in value terms. The physical aspect of the basic distributive principle finds its expression in the distribution of material goods according to work. The value aspect is realized in the principle of distribution of money income according to work. The distribution of consumer goods takes precedence over the distribution of money income. Theoretically this precedence arises out of the precedence of planned development of the socialist economy over the existence of commodity-money relations in the economy [15]. The existence of commodity-money relations can be regarded as an indispensable condition for meeting the requirement of conformity to plan. The existence of these relations in a socialist economy makes it possible to regard the value aspect of the principle of distribution, i.e., distribution of money income according to labor, as a transformation of the physical aspect--the principle of distribution of material goods in accordance with the contribution every member of society has made by his labor.

But the level of realization of the principle of distribution of material goods according to work is closely bound up with the level of equilibrium of the consumer goods market. In the situation of imbalance between the pattern of demand and the pattern of supply, in the situation when the demand for certain goods exceeds the possibility of its commodity coverage, the consumer cannot spend all the income received in accordance with his preferences. As a result extraeconomic factors begin to play an ever growing role in distribution of material goods, factors like the consumer's proximity to the sphere of trade, the place where he lives, and so on, and the importance of distribution of money income according to work decreases correspondingly.

Recognition of the need to realize the law of distribution according to work not only in the value form, but also in the physical form, necessarily leads to looking upon the price under socialism as the price of planned equilibrium. At the present time this would result in a certain revamping of the price structure and thereby a change in the patterns of physical consumption of members of society with differing money income.

N. A. Moiseyenko and M. V. Popov have written as follows in their opposition to this change: "This change (of prices and consumption--N. B, N. P. and

V. P.) would in itself amount to a distortion of the laws of socialist reproduction, an unjustified extension of the requirements of the law of distribution according to work from the value side to the physical side of the personal consumption fund" [12, p 86].

But if we recognize the precedence of the law of conformity to plan over the economic laws giving rise to the existence of commodity-money relations, then the precedence of the principle of distribution of consumer goods according to work also follows from that recognition. And then the question of the "justifiability" or "unjustifiability" can also be put only in the opposite form, specifically: "Is it legitimate to derive the principle of the distribution of money income according to work from the need for distribution of physical goods according to the amount of work?" The reverse proposition is theoretically incorrect. Thus the requirement of realizing the law of distribution according to work under socialism also determines the need for balance between supply and demand.

Aside from the adverse economic consequences which could result from reduction of resources for expanded reproduction relative to their possible level, a decline in the motivation of producers to improve the quality of products they produce, and so on, the scarcity of a number of consumer goods is bringing about many adverse social-psychological consequences. Among them we should note first of all the necessary birth in this case of a "shadow" economy, which aside from the direct social-psychological consequences results in the occurrence of income not earned by work and thus tends to undermine the principle of distribution according to work.

The inevitable nonuniformity of distribution of commodity resources when there is a scarcity of certain commodities leads to a differentiation of consumption which is not legitimate from the sociopolitical standpoint, above all the differentiation between the urban and rural population. This situation figures as an important impediment in solving one of the fundamental problems of society's social development--convergence of the levels of living of the urban and rural population.

An excess of demand over supply also results in the occurrence of lines, large losses of time by the public, and consequently a substantial reduction of the share of free time in the total nonworking time of the workers. Free time, which is an indispensable condition of the "free and comprehensive development of every member of society," i.e., a condition for achieving the basic goal of development of the socioeconomic system, can also be regarded as one of the resources for increasing the economic efficiency of the economy's operation. "Free time, represented both as leisure and also time for more elevated activity," K. Marx wrote, "of course, transforms the person who possesses it into a different subject, and it is as that different subject that he thereafter figures in the production process proper" [2, p 221].

Taking into account what we have noted, it can be stated that the requirement of the balance between the demand for and supply of goods inevitably arises from the fundamental economic, social and political principles of the structure of socialist society.

It is generally recognized that the pricing system under socialism should meet the requirement of bringing prices closer to the socially necessary expenditures of labor. The price which reflects the expenditures of labor corresponding to the socially necessary quantity is that price which balances supply and demand. That is precisely how K. Marx posed the problem: "If a commodity is to be sold at its market value, i.e., in accordance with the socially necessary labor it contains, the entire amount of social labor used in production of the entire mass of that type of commodity must correspond to the size of the social need for it, i.e., the effective social demand" [1, p 211].

The need to regard prices under socialism as the prices of planned equilibrium results from the importance of using feedback loops in the process of managing the socialist economy. Value relations in the economy, and the price structure is one of the principal ones, have extremely important informational content. Moreover, the closer the price structure to the pattern of the socially necessary expenditures of labor, i.e., the closer the real price structure to the structure of the prices of planned equilibrium, the more accurate the information contained in prices on the real capabilities of production and the conditions that exist for consumption.

Demand is determined both by economic and also demographic, social and other factors. But factors of an economic order have to be recognized as the principal ones among them in an examination of the macroeconomic pattern of demand. On that premise only two of all the possible economic factors--income and prices--can be taken as sector functions of the demand. Then the condition of equilibrium of demand and supply can be written in this form:

$$pv = u(\theta, p),$$

where p --vector of prices of commodity; v --diagonal matrix of the supply of goods on the market; $u(\theta, p)$ --vector function of the demand on prices and the parameters θ of the distribution of the population with respect to the per capita level of income.

This system of equations can be regarded as a model of the consumer goods market in planned equilibrium. Here retail prices used in the model are planned prices, the prices of planned equilibrium.

Investigation of the problem of the balance between supply and demand under socialism began in the Soviet economics literature back in the twenties (see, for example, [14]). At the present time a number of economists take as the point of departure in their research the need to examine prices essentially as the prices of planned equilibrium (see, for example, [13, 15-17, etc.]). The view of the price as a price that equalizes supply and demand is also closely bound up with the problem of optimizing the functioning of the socialist economy.*

* The conclusion has been drawn in the study of this question that bringing prices closer to the prices of planned equilibrium is one of the conditions for raising the economy to the optimum development trajectory [6].

But the conception of the prices of planned equilibrium has not been generally accepted. A number of authors have objected to this conception as a whole as well as the possible consequences of its use in the practice of managing the economy (see, for example, [9, 10, 19]).

They advance arguments both against the reduction of prices of goods which are relatively in surplus, i.e., of goods whose sale is held back by the price, and also the raising of prices on goods of which there is a shortage.

In the first case they usually say that reducing the prices of goods whose sale is difficult and which are sitting in above-allowance inventories causes a reduction of revenues of the state budget. But if the conception of the planned balance of the consumer goods market is consistently applied, reduction of proceeds from the sale of goods whose prices had to be reduced will be offset by the larger proceeds on goods of which there was previously a shortage. The reduction of storage costs makes additional money resources available.

The existence of outside markets to which a portion of commodity resources of goods in relative surplus can be sent is yet another argument against the reduction of prices on such goods [4].

Expansion of the export of such goods, thus reducing their supply on the domestic market, can as a matter of fact be regarded as one of the methods of maintaining price stability. But the goods that are in relative surplus at the given price structure are not as a rule goods of supreme quality, do not always meet the requirements of fashion, and so on. Thus the most realistic situation is one in which such goods will not find a market abroad. Reducing their prices will make it possible to invigorate their consumption within the country and thereby increase the level of satisfaction of certain needs of the members of society.

In the second case, i.e., when there is a shortage of a number of commodities, the objection to raising their prices comes down basically to the assertion that such changes are contrary to general policy in the field of retail prices. It is usually declared that "Soviet price policy is not postulated on the conception of balancing supply and demand with prices" [7, p 230]. But the conception of the prices of planned equilibrium does not regard the price as the sole lever for achieving correspondence between supply and demand. If we start from the model of the balanced market, the only conclusion that can be drawn is that the planned values of those principal variables of the market which determine its state must be established jointly, and attainment of equilibrium is guaranteed when there are sound relationships among income, prices and commodity stocks.

The requirement of stability of state retail prices cannot be regarded as a requirement for price stability for all specific grades, types and designations of goods. In our view it is more legitimate to interpret this principle as the requirement of maintaining stability of the general price level. When the issue is stated this way, raising the prices of some goods is offset by the reduction of the prices of others (while basic macroeconomic proportions

are maintained). Moreover, if the prices of goods in some group are raised, it is important how the price structure of the components of the group changes. When the prices are raised of some especially good-quality and fashionable goods, the prices of goods which do not altogether meet the consumer's high requirements, should be reduced.

The general objection to the conception of the prices of planned equilibrium consists of the following. The opponents of this conception feel that prices should reflect "more or less stable relations between needs and the possibilities of satisfying them" and should not "automatically pursue every change in supply and demand.... We," they write, "are against correcting every temporary hitch, every partial discrepancy, by raising prices" [8, pp 43-44]. There are two remarks that need to be made here. The first is that the conception of the prices of planned equilibrium does not consist only of raising prices. And second that prices should not (and cannot) follow "every hitch." The prices of planned equilibrium, set in the process of compiling the national economic plan jointly with income and the size of commodity stocks, take into account only the planned proportions that objectively take shape, and not some momentary set of conditions on the market. This connotation of the prices of planned equilibrium precludes the possibility of abrupt price fluctuations.

In the present practice of centralized management of the economy there has already been some experience in managing retail prices both in the downward and upward direction. But the absence of a unified conception of pricing, the absence of comprehensiveness, and the fragmentariness with which the price structure has been altered sometimes have the result that even a substantial change of prices does not yield the desired result.

The rather obvious, but extremely important conclusion that in the process of compiling the national economic plan we must take into account the interrelationship of retail prices, commodity resources and personal income follows inevitably from the model of the consumer goods market in planned equilibrium. The planned values of those quantities must be determined comprehensively, in a unified system.

Starting from the requirements of equilibrium, the state of the correspondence between the demand for and supply of consumer goods determines the relationship among the three variables--income, prices and the supply of commodities. Each of these variables can be regarded as a balancing lever. Commodity stocks naturally occupy the first place among them, which is a reflection of the active role of social production in the process of satisfying needs, in the process of forming the pattern of consumption. But the process of planned alteration of the physical proportions in the national economy is characterized by gradualness, which is related to the high inertia typical of the economic system. Inertia is also typical of the process of altering the parameters of the distribution of the population with respect to income. Which leads to the conclusion that the price mechanism has to be changed consistently in order to guarantee the state of equilibrium of supply and demand.

In this article we have taken up only the general questions related to the problem of equilibrium of the consumer goods market. The specific ways of attaining the planned balance of supply and demand may vary; their study is an independent task, one that is very important from the standpoint of the theory and practice of managing socialist reproduction.

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7045

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INVESTMENT, PRICES, BUDGET AND FINANCE

PRICE OFFICIAL DESCRIBES CURRENT DEVELOPMENTS

Moscow EKONOMICHESKAYA GAZETA in Russian No 18, Apr 82 p 2

[Interview with N. T. Glushkov, chairman of USSR State Committee for Prices, by EKONOMICHESKAYA GAZETA: "The Price and Production Efficiency"; date and place not specified]

[Text] [Question] Nikolay Timofeyevich, since the beginning of this year industry has been operating on the basis of the new wholesale prices and rate schedules. What have been the results of their revision?

[Answer] The revision has brought the new wholesale prices and rate schedules in industry into conformity with the present-day conditions for production and for the sale of products. They guarantee every branch and subbranch, all enterprises operating normally recovery of production costs and the necessary profit. The only exception is the coal industry, in which a planned rate of loss has been preserved because of the substantial increase in the production cost of coal (because of deterioration of mining-geological and other conditions).

In the industrial sector as a whole profitability is 14.5 percent relative to productive capital and 16.5 percent relative to production cost.

A higher profitability has been incorporated in the new price lists for progressive, more economical and better-quality articles and products for which the national economy is experiencing the greatest need. In machinebuilding, for example, the rate of profitability is 1.5-2-fold higher on spare parts than on the respective equipment in order to encourage their production.

Putting the new price list into effect guarantees price stability during the 5-year period, which is important to organizing business relations and strengthening cost accounting (khozraschet).

[Question] In their letters readers have raised the issue of the method for setting wholesale prices on new products for production and technical purposes being imperfect. What is the State Committee for Prices doing to improve the methodology for setting prices?

[Answer] As a matter of fact, this method, which was approved back in 1974, is in need of improvement. A draft has already been prepared of a new method for determining wholesale prices of machines, equipment and instruments; it has been sent for consideration to the USSR State Committee for Science and Technology and to ministries and departments.

On the basis of the method now in effect project planning and design organizations have been able to "push" costs up to the level of the so-called upper limit of the price and to pay less attention than they should to designing new technology at minimum cost. It has now been provided that the ceiling price, which is an indispensable indicator of the technical assignment to design something, must be determined on the basis of production cost. But new technology should not be created at the economy's expense. All costs are not charged to the ceiling price, but only those costs which are economically justified and are incurred in creating highly efficient machines and equipment that meet the requirements of the superior-quality category.

Quality and price must change in the same direction. There is a mandatory condition operative here--relative reduction of the cost of new technology, that is, a drop of prices per unit productivity, service life or other useful benefit. Highly efficient and good-quality technology should be stimulated not only by the price, but also by establishing a supplement to the price as an incentive. This principle of establishing wholesale prices and incentive supplements has been adopted in the method and pricing practice.

[Question] Workers of enterprises and organizations sometimes ask about the supplement being established for the entire life of the Quality Emblem. It would be interesting to have the opinion of the State Committee for Prices on the soundness of such proposals.

[Answer] The incentive supplements to wholesale prices on highly efficient new products are established for a period of 1 year, and on products of particular complexity--for 2 years. If the product is awarded the Quality Emblem, the supplements are extended over the life of the emblem. If the Quality Emblem is awarded a second time, the incentive supplement is extended only if there is an improvement of the technical-and-economic parameters. If they do not improve, the size of the supplement and the period of its validity are cut in half.

Thus, as experience has shown, the incentive supplement is established on a new product for a period up to 7 years, and on an especially complicated one--up to 10 years. In our view this is a sufficient period to motivate creators of new technology--scientific research institutes, design offices and manufacturing enterprises. Extending it when the product is subsequently awarded the Quality Emblem is not economically advisable; the supplement could become a hindrance to renewal of products instead of an incentive. Moreover, on the average equipment becomes obsolete in 5-6 years.

USSR Goskomtsen [State Committee for Prices] awards more than 3,000 incentive supplements every year. Their size, as is evident from the following table, has been increasing substantially and in 1981 averaged 6.9 percent of wholesale prices.

Incentive Supplements to Wholesale Prices of the Products of Machinebuilding, %

<u>Year</u>	<u>Size of Supplement</u>
1977	3.3
1979	3.5
1980	6.2
1981	6.9

The size of the supplements has been 13.8 percent on highly efficient new products and products bearing the state Quality Emblem whose production is based on developments proclaimed to be discoveries or inventions.

The supplements have been stimulating an increase in the output of highly efficient products. For instance, the sum total of additional profit from sale of products in the superior-quality category was 333.2 million rubles in 1980 for machinebuilding ministries alone. Up to 70 percent of that sizable amount goes to economic incentive funds of creators of highly efficient new technology--scientific research institutes, design offices and manufacturing enterprises.

[Question] And what is the economic significance of discounts from wholesale prices on obsolete products?

[Answer] As we know, enterprises must automatically credit to the state budget discounts applied to wholesale prices on products in the second-quality category which have not gone through certification within the required period of time. The amount of the discount is to be 50 percent of the actual profit from the sale of that product, and when the period for withdrawing the product from production expires--the entire amount of profit is to be collected.

As a matter of fact, the total amount of the discounts paid into the budget is quite negligible and in 1980 amounted to only 2.8 million rubles. Among the causes of this situation we should mention cases of unobjective product certification, unjustified boosting of the quality category by branch certification commissions, and violations of the procedure for transferring profit to the revenues of the state budget by enterprises. In addition, in a number of cases outdated products actually do not have a profit.

USSR Goskomtsen has adopted a decision concerning cases of violations discovered at enterprises in 1981 to confiscate the profit they had realized unlawfully.

It seems to us that economic penalties for outdated products, including those imposed through prices, should be strengthened. USSR Goskomtsen has established discounts on wholesale prices for product manufacturers on articles to be withdrawn from production in 1982. These discounts are expressed in an absolute amount for each article and do not depend on the actual profitability.

Taking into account that prices should be stable throughout the 5-year period in order to strengthen the role of the 5-year plan, the discounts are being

introduced only for product manufacturers, while prices in effect are retained for consumers. The product is entered in the manufacturer's plan at the full price, but the assessment of plan fulfillment is made so as to take into account the discounts.

[Question] What measures are being taken by the state committee to strengthen the effect of prices toward an economy regime?

[Answer] USSR Goskomtsen is awarding incentives first to those products whose economic benefit is furnished while the product cost is reduced by virtue of reduced materials intensiveness, through the use of inexpensive types of raw and processed materials, and by reduction of the labor intensiveness while the technical-and-economic parameters and quality of the product have been retained or improved. The effect of wholesale prices to encourage use of more inexpensive types of raw and processed materials, substitutes and production waste has been strengthened. Wholesale prices on new products with lower materials intensiveness are being set so as to take into account retention of the size of profit realized from the sale of the product previously produced, but not less than the standard rate.

In the case of new and modernized products whose parameters meet the best domestic and foreign exemplars the incentive supplement takes into account up to 50 percent of the saving obtained in manufacturing by virtue of lower material and labor costs. This saving is taken into account in the price on a product in the first-quality category.

A number of methods instructions have been adopted which promote the normative method of determining costs, use of energy-saving and materials-saving technologies, and labor saving in order to achieve a reduction of production cost per unit of the product's useful benefit, combined with improvement of quality.

The principle has been established that rates of metal consumption are to be reduced at least 18-20 percent from the base product when prices are being set on new products. Designers, mechanical engineers and technologists involved with new technology must also guarantee in their design a reduction in the specific metals intensiveness of the product.

[Question] Letters to the editors speak about the need to enhance the responsibility of customers, developers and manufacturers for the computation of economic benefit taken into account in prices. How is this problem being solved?

[Answer] This is a complicated issue, and it has been properly stated. Those who commission new technology and those who manufacture it must be accountable for the benefit they agree on. USSR Goskomtsen thoroughly checks the computations of the economic benefit coming in from ministries in order to establish the soundness of prices and to determine the size of incentive supplements. On the average, as an analysis has shown, the economic benefit is hiked up 30-50 percent in the computations. This occurs because the manufacturer has an economic motivation to show high effectiveness. And the consumer

is interested in manufacturing the new product as soon as possible and is ready to confirm the size of the benefit without a proper check of its authenticity, since he bears no economic liability for it.

In our view the economic benefit must be planned through all stages of creating new technology--from its design to its application. This issue should be resolved by USSR Gosplan jointly with the State Committee for Science and Technology, USSR Goskomtsen and other ministries and departments. Plans, above all those of consumers, must reflect the reduction of production cost under the heading of current costs in the operation of new technology and the reduction of capital investments by virtue of the increased productivity of equipment. This would help to increase the accountability of customers for the actual effectiveness of new technology.

The decree of the CPSU Central Committee and USSR Council of Ministers on improvement of project plans and estimates, which was adopted in March 1981, provides that project plans for construction of the largest and most important enterprises and installations shall be examined by USSR Goskomtsen before their approval.

An expert commission of USSR Goskomtsen checks the economic soundness of wholesale prices of machines and equipment envisaged in the project plan for construction or reconstruction of enterprises and the soundness of the projected production cost of the finished product. In our opinion this kind of check will tend to improve the soundness of estimated construction cost.

USSR Goskomtsen and other pricing authorities are continuing their work to improve all forms and methods of monitoring and to strengthen state price discipline.

More than 60 million rubles of profit illegally realized by enterprises and organizations by violating price discipline have been collected in penalties for 1981 and paid into the state budget.

Closer attention has also been paid to intradepartmental monitoring, comprehensive and special-subject checks have been scheduled for enterprises in various sector of the economy. In addition, a 5-year plan has been adopted for joint programs with the AUCCTU, which will make it possible to involve the broad trade union aktiv in the effort to see that retail prices and rate schedules for services rendered to the public are correctly established and correctly applied.

7045

CSO: 1820/145

INVESTMENT, PRICES, BUDGET AND FINANCE

BRIEFS

ACCOUNTING PRICES DEFINED--The General Economic Division of USSR Goskomtsen has explained that accounting prices are the wholesale prices of enterprises differentiated so as to take into account differences in natural and other objective conditions of production and helping to equalize cost-accounting profitability. They are used in the extractive and related sectors. Intraplant accounting prices are set on products going through transactions within plants for certain production operations, associations and large enterprises. Accounting prices are also used in agroindustrial associations in mutual settlements among the farms cooperating within that association. Wholesale prices of agricultural raw materials delivered to certain branches of industry (the meat industry, the milling and hulling industry and others) and also prices on intermediate products in the production of certain types of agricultural products are a special variety of accounting prices. [By V. Tararykova] [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 16, Apr 82 p 16] 7045

PRICE INCREASES APPROVED, REJECTED--USSR State Committee for Prices has examined accounting materials submitted by the Ministry of Electrical Equipment Industry to record the ceiling price on the modernized SNOS-10.13.10/3-12 electric furnace, intended for drying armatures and stators of electric motors and magnetic systems after dipping and painting with enamels and varnishes. The productivity of the new electric furnace has remained the same, 62.5 kg/hr, but the power consumption has been reduced 15 percent; specific consumption of electric power 11 percent and the furnace's total weight 17 percent (from 3,600 to 3,000 kg). Taking into account this drop in production cost, USSR State Committee for Prices adopted a decision to record the ceiling price at the level of the wholesale price of the analog in the amount of 10,000 rubles. USSR State Committee for Prices did not approve the supplement to the wholesale price represented by the Ministry of Construction, Road and Municipal Machinebuilding on the IE 1023A electric drill manufactured by the Rezekne production association Elektrostroyinstrument, certified for the state Quality Emblem. This decision was taken because the additional costs related to improving the technical-and-economic parameters have already been taken into account in the drill's wholesale price, and the benefit does not guarantee the minimum necessary ratio for assignment of the incentive supplement. [Text] [Moscow EKONOMICHESKAYA GAZETA in Russian No 17, Apr 82 p 7] 7045

INDUSTRIAL DEVELOPMENT AND PERFORMANCE

DESIGNING OF INDUSTRIAL PROJECTS

Novosibirsk EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA in Russian No 4, Apr 82 pp 3-19

[Article by V. I. Nikitin, director of Lenpromstroyproyekt, and engineer A. A. Panteleyev (Leningrad): "Industrial Designing: New Tasks"]

[Text] In the Basic Directions of USSR Economic and Social Development for 1981-1985 and the Period to 1990 it is noted: "To improve planning estimate work, to carry out construction according to the most advanced and economic designs." The decisive turn toward intensive management, which was outlined by the 26th party congress, cannot be accomplished without bringing the designing of industrial structures in line with the new tasks.

The improvement of designing is one of the most important conditions of the increase of the efficiency of the national economy. Both the progress of construction and the operation of newly built works depends on the quality of designing. Errors made in a design often preclude the achievement of high results and lead to the inferiority of new enterprises. Their elimination entails great difficulties, or else is completely impossible.

In the course of the scientific and technical revolution the scale and complexity of production steadily increase, following them the tasks facing designers also become more complicated. Modern enterprises are branched complexes, systems with a developed network of internal and external ties. In turn they are components of systems of a higher level: industrial centers, territorial industrial complexes and so on. In designing all the ties should be taken into account and the best conditions of operation should be ensured for each of them.

To what extent are our efforts, the efforts of designers crowned with success? Does a solved problem bring satisfaction? It turns out either way.

Light and Shadows

In 1980 the Nikolayevskiy Alumina Plant joined the operating enterprises. The enterprise was designed and built in a short period, a number of new, advanced decisions, including ones implemented on the level of inventions, were used in the design. The placement of equipment outside the buildings was carried out on an extensive scale, which decreased the cost and expedited the construction. The pulp plant of the Ust'-Ilinsk Lumber Industry Complex was successfully designed and

built, the construction of a plant of aluminum structural members in Leningrad is being completed. Such work, of course, aroused satisfaction and pride among the members of our collective.

However, in many (alas, too many!) instances the efforts of designers come up against insurmountable barriers, the design decisions assume a forced nature and do not provide the proper national economic efficiency.

The Cherepovets Metallurgical Plant--the "Northern Magnitka"--is one of the largest plants of the country. Lenpromstroyproyekt has been a participant in the building and development of the Cherepovets Metallurgical Plant from its founding in 1949 to our times. In recent years the institute has designed and is designing new projects of the Cherepovets Metallurgical Plant: the complex of the 2000 rolling mill (put into operation in 1975), an oxygen converter shop with a department of continuous steel casting (put into operation in 1980), the complex of blast furnace No 5 (the designing and preliminary work are being performed), agglomeration factory No 4 (the technical and economic substantiation is being drawn up).

It is typical for these operations, first of all, that the designing and placement of capacities into operation are being carried out in an order which is the opposite of the technological process. Newly built shops cannot be brought up to the design capacity due to a shortage of the source intermediate product. For its production has still not been set up. Thus, the 2000 mill with a design capacity of 6.3 million tons of sheet a year 5 years after start-up is rolling only 3-4 million tons. The slabs being put out by the department of continuous steel casting do not conform to the furnaces of the 2000 mill, which required the creation of an intermediate (extra!) link in the technological chain.

The most important thing consists in the fact that the construction of all these conversions--actually a large plant of a complete metallurgical cycle (the new blast furnace will be the largest in the USSR)--was performed without a comprehensive design study. A place was not set aside in the master plan of the plant for newly appearing powerful shops, and now they literally have to be squeezed into the structure of the operating metallurgical plant with all its complicated service lines.

Of course, the transportation layout of the plant is not notable for logic and efficiency, the excessive flow of cargo (raw materials, the intermediate product, the output) is observed. And, of course, the most modern arrangement of these shops would not be able to offset the disproportions and freezing of capital investments.

The disregard of designing by the Ministry of Ferrous Metallurgy and the replacement of the comprehensive solution of a major problem by special tasks, which are not united by a common idea, are conspicuous. Such an approach is not limited, unfortunately, to the Cherepovets Plant. The Novolipetsk Metallurgical Plant is being expanded in the same way.

Another example is also indicative: the plan of the Cherepovets Industrial Center provided for the delivery by water from the Kola Peninsula of iron ore concentrate and apatites--the basic raw materials for the metallurgical and superphosphate

works. The construction of a river port at Sheksna was planned for this purpose. To this day the port has not been built, and the plants obtain all the raw materials only on wheels. "For a number of years now the Ministry of Ferrous Metallurgy, the Ministry of the Chemical Industry and the Ministry of the River Fleet have firmly taken the position of indifference to the problems of the comprehensive development of the Cherepovets Industrial Center. The projects... of transportation are not being backed with financing, are being arbitrarily excluded from the start-up complexes," Secretary of the Cherepovets City Committee of the CPSU V. Saranskikh writes.¹ As a result, the overloaded rail transport is not coping with the traffic volume.

Another illustration is from another area. The production of sulfuric acid at the Cherepovets Superphosphate Plant is accompanied by the formation of 1.5 million tons of waste products a year--pyrite cinders. These cinders contain more than 60 percent iron (nearly as much as iron ore concentrate) and a wide range of other elements (lead, zinc, tungsten and others). The presence of these impurities makes the direct use of the cinders in the blast furnace process impossible. In 1964 in the plan of the Cherepovets Industrial Center Lenpromstroyproyekt proposed to build a hydrometallurgical works for the separation of the cinders into components. However, this proposal was not reflected in the plans and was not implemented. The cinders are being thrown into the dumps.

In many other instances the proposals of designers on the building of works for the processing of byproducts and waste products usually are also not reflected in the subsequent stages of the planning and in the plans of the development of sectors.

Perhaps the cited examples are a regrettable exception and Cherepovets alone turned out to be so unlucky? Unfortunately, it is not so. The Dnepropetrovsk Mining and Concentration Combine was designed by Lenpromstroyproyekt on the order of the Ministry of Ferrous Metallurgy and was built as a finished enterprise which releases commodity production--concentrate. After 5 years a pelletizing factory, at which the concentrate is converted into blast furnace stock--iron ore pellets--was built next to it. The technological process, which could and should have been uniform and continuous (as it was decided, for example, at the Kostomuksha Mining and Concentration Combine), turned out to be broken. This led to a large number of unnecessary technological operations at the mining and concentration combine: the desiccation, drying, storage and transportation of the concentration. Additional equipment, facilities and installations and, of course, manpower and energy resources were required. The saddest thing is that at the pelletizing factory the dry concentrate is again mixed with water.

One of the important aspects of the design activity of the institute is the drawing up of the plans of industrial centers, documents which suggest the combined layout and economic organization of neighboring industrial enterprises. In many instances the plans of industrial centers, which have been approved by USSR Gosstroy, are not implemented in full or are not implemented at all, for example, the plans of the Novoul'yanovsk, Plisetsk and Tavda industrial centers. The reason is the shortcomings in planning, the disregard of these plans by the building ministries,

1. "The Industrial Center and the City," SOTSIALISTICHESKAYA INDUSTRIYA, 5 March 1980.

the lack of conformity of the cooperative construction of the centerwide projects to the sectorial system of financing.

Let us turn to the organization of designing.

The elaboration of the working drawings and within them of the detail drawings is one of the most large-scale, labor-consuming parts of the process of designing. They are the drawings of the reinforcing items and embedded fittings and their arrangement in the reinforced concrete structural members, the architectural parts, the seatings for the simplest equipment and so on. The following figures illustrate the scale of the work: when designing the 200 mill of the Cherepovets Metallurgical Plant 1,500 pages of detail drawings were prepared, while for the oxygen converter shop of the same plant--1,400 pages.

The elaboration of the detail drawings is an unproductive pursuit, since a significant portion of them are redone at the construction site (as a rule, by the field brigades of the institute). The point is that the construction sites are thousands of kilometers from the institute, while the laws in force make it incumbent to turn over the working drawings to the construction workers for the annual amount of work no later than the middle of the preceding year. A gap of half a year, or else a year or more, is inevitable. During this period the conditions agreed on in advance change substantially, and the drawings cease to conform to the available assortment of reinforcement and rolled products, the equipment of the construction bases. The disagreement in the solution of similar designs, which arose as a result of the participation of many design organizations in the designing, the arrival at the construction site of component equipment of unspecified makes and so on also have an effect.

Apparently, it would be advisable, as some authors suggest, to turn over the elaboration of the detail drawings to the construction ministries. Especially as Gostroy has transferred a number of its institutes to them.

The cited examples can be supplemented by many others both from the practice of Lenpromstroyproyekt and from other organizations, but I would like to dwell separately on the problems of hydraulic engineering designing and construction. They are carried out within a single ministry (the Ministry of Power and Electrification) and often have a distinct departmental imprint.

The scale of the influence of hydraulic engineering on the natural environment and the economy of regions is very significant. The areas of reservoirs, for example, testify to this scale: the Bratskaya GES--5,410 km², the Kuybyshevskaya GES--more than 6,000 km². Mainly inhabited lands in the climatically most favorable zones were taken up by them. Meanwhile there is no certainty that the hydraulic engineers chose the sites and heads of the hydraulic developments following a comprehensive estimation of the harm being done. Thus, following the approval of the design and the start of construction the head at the Bratskaya GES was increased from 60 to 90 m, while at the Kuybyshevskaya GES--from 15 to 25 m. This sharply increased the area of flooding.

The lack of ship locks and bridge overpasses at Angara and Yenisey hydraulic developments also does not meet the interests of the national economy. The violation

of economic expediency by hydraulic engineering has more than once been sharply criticized by the press.²

The uncoordinated actions of the Ministry of Power and Electrification and the Ministry of the Coal Industry are creating serious obstacles to the construction of the first projects of the Kansk-Achinsk Fuel and Power Complex (which the press has also discussed).

Dams and reservoirs, irrigation systems on the present scale have a diverse influence on the entire spectrum of natural and national economic conditions of vast regions, which it is difficult at times to determine in advance. The decisions on their construction should be made on a sufficiently high intersectorial level with the involvement of competent scientific instances.

Causes and Suggestions

From what was said above it is possible to draw the conclusion that designing does not meet the requirements of the scientific and technical revolution and needs radical improvement. This is confirmed very authoritatively by the decree of the CPSU Central Committee and the USSR Council of Ministers of 30 March 1981 (No 312), "On Measures on the Further Improvement of Planning Estimate Work," in the preamble of which it is noted: "...the prevailing procedure of designing no longer promotes the acceleration of the introduction in the national economy of the achievements of science and technology and the solution of the problems in the area of capital construction, which stem from 'The Basic Directions of USSR Economic and Social Development for 1981-1985 and the Period to 1990'."

In the decree it is outlined to eliminate a number of the major defects from which designing suffers today. The long-range anticipatory planning of design work is being introduced, the authority and importance of the plans of the development and distribution of productive forces and of the plans of the development and distribution of the sectors of industry are increasing, one of the stages--the technical and economic substantiation--is being eliminated and so on. But it does not solve and cannot solve all the practical problems of the improvement of designing. Their elaboration is being entrusted to USSR Gosstroy and USSR Gosplan.

In this connection I would like to state several views on the causes of the lag of designing and on the means of eliminating them.

First of all about the causes of the shortcomings in designing. In our opinion, they are, first of all, its obsolescence, the lack of systemicity and departmental domination.

The organizational forms, in which designing is carried out today, were elaborated back before the war, during the years of the first five-year plans, while they were definitively formed in the early 1950's. A passing glance is sufficient to estimate the distance which separates the level of national economic development of those years from the current level. The amount of capital investments from 1950

2. See, for example, B. Mironov, "The Abalkovskiy Debate," PRAVDA, 23 January 1980; Ye. Vorob'yev, "Our Sea Is Unsociable," LITERATURNAYA GAZETA, 5 March 1980.

to 1980 increased 11-fold. Whereas during the years of the first two five-year plans the total amount of capital investments in comparable prices was equal to 28.5 billion rubles, during the 10th Five-Year Plan alone it came to 634 billion rubles. The tasks of designing increased on a large scale and became more complicated. Its forms, which were elaborated in the 1930's or even the 1950's, are unsuitable today.

The lack of systemicity appears at all the stages and in all the forms of design activity, but especially pointedly at the stage of predesign preparation. The basic questions concerning the regions, the zones of intensive construction, which are included in it, and the individual enterprises, are substantiated and solved during it.

At this stage there are specified: the plans of the development and distribution of productive forces in the regions, the plan of the development of industrial sectors, the specializations and capacities of the enterprises which it is planned to build, the plans of the formation of industrial centers; the architectural and layout organization of the regions, the plans of the building and development of cities, the measures on environmental protection, the plans of the creation of regional and regionwide construction complexes, the plans of the regional transportation systems, the plans of engineering support and so on.

Today the solution of these questions is regulated by a large number of standard documents, which were prepared and put into effect by USSR Gosplan, USSR Gosstroy, the State Committee for Civil Construction and Architecture, the State Committee for Hydrometeorology and Environmental Control and other instances, and their alignment was not ensured. As a result, seven have a territorial orientation, while two have a sectorial orientation. On the basis of these documents 10 predesign forms should be drawn up. Designing adds to them another five design forms and one instruction.

No less inconsistency exists in the instances which are called upon to review and approve the preplan and predesign documents (USSR Gosplan, USSR Gosstroy, the councils of ministers of the union republics, numerous ministries and departments).

Of course, all these forms are not the fruit of the fancy of the legislator. Each one is aimed at the solution of a specific group of questions, without which the design will be inferior. But these numerous predesign forms, which are drawn up by institutes of different departmental subordination, from various sources of financing, during different periods, on the basis of different standard instructions and in the absence of a general plan of their elaboration and, finally, which are reviewed by different approving instances, do not constitute a single, purposeful system. Can it be expected that a large number of forms, which are void of uniform control and interconnection, will be coordinated and will ensure the unity and high quality of the decisions which have been made?!

What should the system of predesign and design work on the development of industrial sectors, regions, territorial production complexes, rayons, industrial centers, cities and enterprises be like? It seems to us that it should ensure the multistage advancement of the regional and sectorial design forms from general decisions to specific decisions. The goals of each form should be clearly defined,

the results anticipated from its elaboration, as well as the composition of the institutes participating in the work should be designated. Each form should be elaborated on the basis of the preceding one and, in turn, should serve as the basis for the elaboration of the following one.

The solution of these and other problems would be possible on the basis of a single standard document instead of the numerous ones now in effect--the Unified System of the Technological Regulations of Designing (YeS TPP)--which could regulate the sequence, stages and forms of the design documents, the procedure of their approval and the principle of the enlistment of design organizations. This would make it possible to create a concise and precise system, which is free of parallelism and duplication, but reserves for the compiling organizations their authority and responsibility. A possible version of such an arrangement of the organization of designing is presented in the diagram.

Let us explain it.

The comprehensive plan of the development of a region or territorial production complex (form 1) is a synthesis of the four forms now in effect: the plan of the development and distribution of productive forces, the plan of the rayon (regional) layout, the regional plans of conservation and the development of the base of the construction industry.

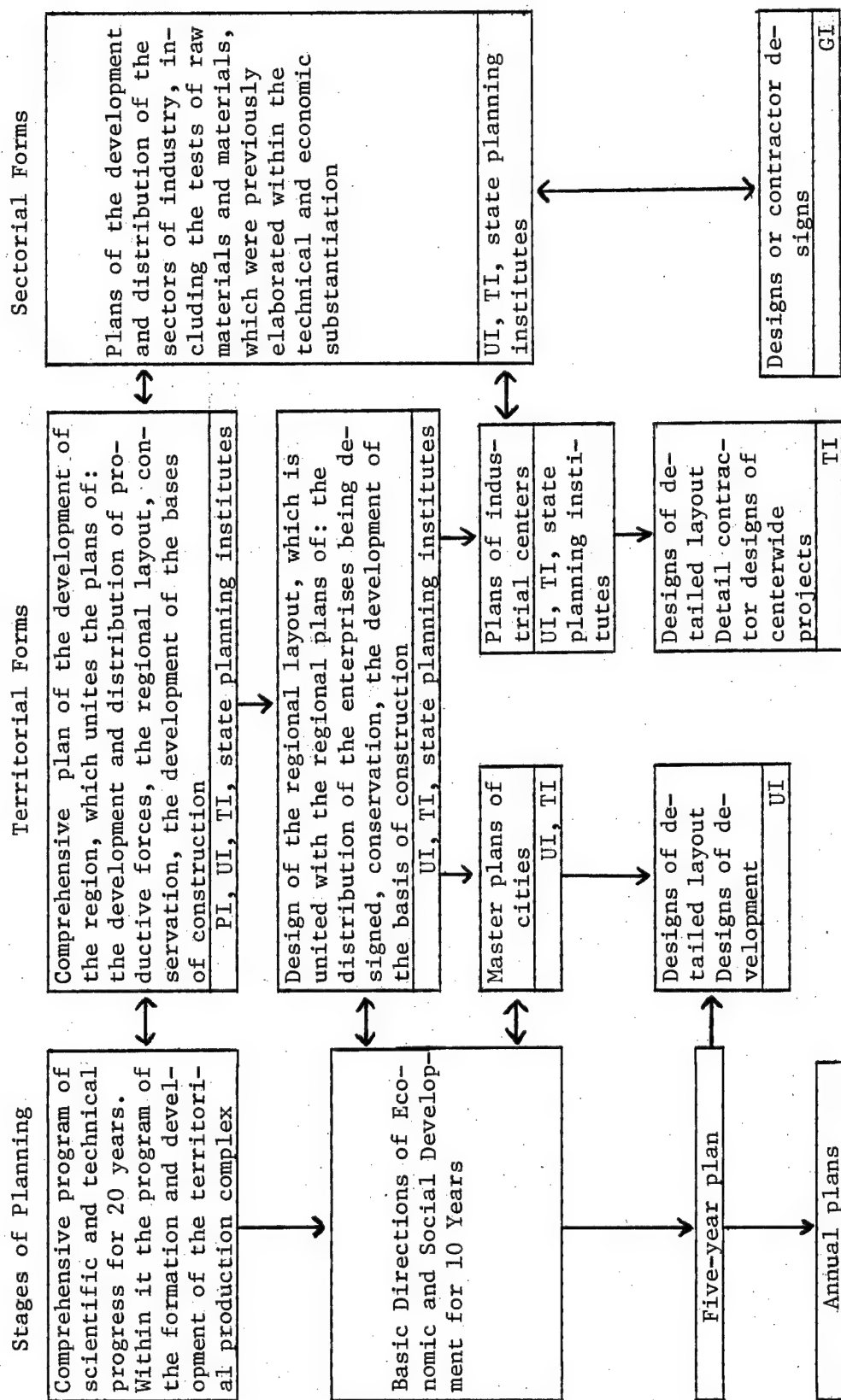
This predesign stage converts the first stage of planning: "The Program of the Formation and Development of the Territorial Production Complex," into a specific form which has been placed on the topographic true basis. A close interrelationship of both forms (the plan and the design) is natural. It is also natural that the leading role in the drawing up of form 1 should belong to the institutes of USSR Gosplan and the USSR Academy of Sciences in close cooperation with territorial and urban development institutes and with the enlistment of all the necessary specialized institutes--transportation, power engineering, water management and so on.

The technological design institutes (state planning institutes) of those industrial sectors, which have direct or indirect interests in the region, should also be enlisted in the compilation of the comprehensive plan of the development of the region. It must be coordinated with the plans of the development and distribution of the sectors of industry (form 5).

The plan of the regional layout (form 2) is an existing form. However, a new, more extensive content is being incorporated in it. It is being combined with the plans of the distribution of the enterprises being designed and with the regional plans of conservation and the development of the base of construction.

The plan is drafted in conjunction with "The Basic Directions of Economic and Social Development for 10 Years," which is stipulated by the new procedure of planning in the Decree of the CPSU Central Committee and the USSR Council of Ministers of 12 July 1979. The approved plan of the regional layout serves as the basis for the compilation of the plans of the industrial centers located in the region and the master plans of cities (forms 3 and 4).

Possible Diagram of the Organization of Designing



The institutes participating in the designing are designated by: PI--planning institutes, TI--territorial institutes, UI--urban development institutes, CI--general construction institutes. Specialized institutes participate in all the forms.

A serious shortcoming of designing (which also stems from the lack of systemicity) is the separation from planning. Its stages and forms are not coordinated with the stages of planning, systems relations are lacking, in particular, the data obtained at the early stages of the design developments are far from always used for the more exact definition of the subsequent stages of planning (let us recall the examples with the river port and the pyrite cinders at the complex of the Cherepovets Metallurgical Plant).

The most important factor, which determines the value of national economic decisions, is their comprehensiveness. And in designing comprehensiveness should become the leading principle. Let us dwell on this question in more detail.

The complete use of raw materials and byproducts is acquiring particular urgency in connection with the rigid demands of the efficient use of natural resources. Meanwhile the organization of valuable comprehensive tests of raw materials and the rock which accompanies their extraction has not yet found a permanent and precise place in the materials of the plans of the development and distribution of productive forces of regions and of industrial enterprises.

A great national economic impact is provided by the combined location of enterprises within industrial centers and by the cooperative decision of both the ancillary works in the industrial centers and the transportation, warehouse, engineering and other services for development and industrial agglomerations. The questions of cooperation are examined by the territorial organizations of Gosstroy. However, the implementation of the decisions made by them is being hindered or is being completely frustrated by the departmental system of the financing of construction. The requirements on the assurance of national economic comprehensiveness in the designs should, it seems to us, be precisely formulated in the Unified System of the Technological Regulations of Designing.

Comprehensiveness is completely lacking in the organization of the process of designing, and this appears most vividly within the organizations being enlisted in the designing. The quality of designing today depends directly on whether specialists of all the necessary sectors have been enlisted in it and whether all the different (and at times conflicting) interests have been taken into account. Otherwise we are doomed in practice to one-sided, inferior decisions.

It has already been said that the numerous prevailing standard documents are not aligned with each other. They do not contain requirements which determine the composition and interrelations of the institutes which are involved in the elaboration of one predesign or design form or another. USSR Gosplan is not concerned at all with the composition of the participants in the designing. Most often it is determined by the general designer institutes out of business considerations and is far from the optimum composition. In many instances the composition of the participating institutes changes with the transition from stage to stage.

The institutes which determine the composition of the participants (and technological state planning institutes usually act as them) do not always strive for the comprehensiveness and balance of the designs. The decisions being implemented by them are considerably more often of a distinct departmental nature. The replacement of state interests by departmental interests often causes the national economy serious losses. It is logical that the sectorial ministries and their institutes are

concerned with the production technology and select and order the technological equipment. But why do these organizations take upon themselves the construction section of the production assignments (which often is no more complicated than the technological section), violating the rights and duties of Gosstroy as the manager of the construction sector (to say nothing of its rights as a supradepartmental state committee of the USSR)?

While participating in the checks of the activity of the technological institutes, Lenpromstroyproyekt had opportunities to become convinced that in such instances the quality of the construction designs is not always at the proper level. Just one of the unjustified decisions (the increase to 48 m instead of 32 m of the distance between the shafts of the converters) increased the construction volume of the buildings of the converter shop and the department of continuous steel casting at the Novolipetsk Metallurgical Plant by hundreds of thousands of cubic meters.

The plans of the development and distribution of the sectorial industry are sectorial documents. But during their preparation the questions, which belong to the direct competence of the sector (the determination of the production capacity and the product assortment, the provision with raw materials, the main technological decisions), make up only a section of this stage. Interdepartmental questions, such are the optimum location of enterprises in the territorial production complex, the region and the industrial center, transportation and power engineering, water supply and drainage, the organization and location of housing construction, the complete use of raw materials and waste products, environmental protection, questions of cooperation with other works and the organization of construction, are also of no less importance. They go beyond the competence and interests of the sectorial ministries and will hardly be regarded by them from a national economic standpoint, which in many cases practice also confirms.

In the elaboration of the contractor designs the technological section is just one of the many other sections of designing: the master plan, the transportation section, the architectural and construction section, the sanitary engineering section and so on. The domination of the technological design institutes is unjustified. Both during the compilation of the plans of the development and location of the sectors and during the elaboration of the designs the task of the general designers consists, obviously, in enlisting in due time the institutes of all the specialties which are touched upon by the design.

Hence it follows that the principles of the enlistment of institutes which participate in the designing should stipulate the responsibility and competency of the participation of designers of all specialties. Dictates on the part of the general and main designer are inadmissible. In particular, it seems to us, the full and equal participation of the institutes of Gosstroy in the entire process of designing, beginning with the plans of the development and distribution of the productive forces in regions and the plans of the development of industrial sectors, should be ensured. The duties and rights (and in necessary instances the organizational functions) of the institutes of Gosstroy at all the stages of the designing should be assigned in conformity with the norms in the Unified System of the Technological Regulations of Designing.

It is best of all for the institutes of Gosplan and the organizations of Gosstroy--territorial and urban development--to be the general designer of the territorial

design forms (the comprehensive plans of the development of the region, the designs of regional layouts and industrial centers). It is convenient to reserve the general designing of the sectorial forms (the plan of the development of sectors, the designs of enterprises) for the technological design institutes. It is important for the composition of the subcontracting specialized institutes to be constant at all the stages of the designing. For this it should be set down in the plans of the design work.

Until recently the norms for designing were not meant for the machine building ministries which supply nonstandard equipment, and the machine builders did not participate in the elaboration of the initial stages of the design. Decree No 312, which was mentioned above, eliminates this major shortcoming. It is noted in it: "To obligate the machine building ministries to perform work on the designing of equipment prior to the disclosure of the title lists for the designing of enterprises." But it is also necessary for the equipment to be designed on the basis of the comprehensive assignments, in the drawing up of which not only process engineers, but also construction workers, sanitary engineers and specialists of the other interested sectors would participate. This will make it possible to solve chronic problems such as, for example, the closing of dust-raising sections of transportation and technological equipment. Today the wet removal of spills in sinter production increases the cost of construction and operating expenses by 15-20 percent.

An important condition of the full value of designs is their objective, authoritative and supradepartmental review and approval, the impossibility of any subsequent changes without the consent of the instance which approved them.

The decree of 12 March 1981 provides for the approval by the USSR Council of Ministers of the designs of important and large enterprises after they have undergone the expert appraisal of USSR Gosstroy, the State Committee for Science and Technology and the State Committee for Prices. It warns, however, that the right to approve other designs is reserved for the ministries. It enables them at their own discretion and on the basis of their own interests to decide whether they are to design new complexes as a unified whole and to submit their designs for the consideration of Gosstroy and the State Committee for Science and Technology or to break these complexes down into individual projects which can be reviewed and approved within their own walls. Experience shows that ministries frequently choose the latter means.

What has been said is clearly illustrated by the example cited at the beginning of the article concerning the designing of the new works at the Cherepovets Metallurgical Plant. It is extremely necessary for the limits of the competence of ministries in the approval of designs to be clearly stipulated in those standards on designing, the preparation of which has been assigned to USSR Gosstroy and USSR Gosplan.

We believe that the implementation of the presented measures would promote to a considerable extent the raising of designing to the level of the tasks facing it.

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RESOURCE UTILIZATION AND SUPPLY

COMPOSITION, APPRAISAL OF USSR'S NATIONAL WEALTH

Moscow IZVESTIYA AKADEMII NAUK SSSR: SERIYA EKONOMICHESKAYA in Russian
No 1, Jan-Feb 82 pp 20-32

[Article by L. L. Zusman]

[Text] The article examines the composition and appraisal of elements of the USSR's national wealth, cites and substantiates the economic appraisal of utilized natural resources (farm land, minerals, forest and water resources) on the basis of the expenditure concept. An analysis is made of the inappropriateness of including natural resources among national wealth on the basis of their appraisal based on differential rent I.

The Materials of the 26th CPSU Congress state: "To secure the effective utilization of natural, material and labor resources as the decisive and most effective method of augmenting the country's national wealth..." [3]. However, there are differences of opinion regarding the physical content and methods of appraising in value terms various components of national wealth.

This is evidently the basic reason why national wealth to this very day is not a planned category among the various indicators of development of the national economy. Only in recent years has the incomplete appraisal of national wealth on the whole (not counting the value of land and forests) begun to be published in statistical annuals of the USSR Central Statistical Administration in the form of notes to the data on fixed capital.

The existing disagreement concerns such cardinal issues as the appropriateness of classifying as national wealth cultivated farmland, pastures, hayfields, forests, fruit orchards and vineyards, surveyed and exploited mineral deposits, and other natural resources used in social production. The justification for classifying as national wealth property with a short service life (under 1-2 years) belonging to the population; the population's cash savings; loans to the state; housing built by housebuilding cooperatives and paid for by citizens; utilized living space; and funds advanced for the period of construction remains open to debate.

Proposals are still being put forth and "substantiated" regarding the inclusion of the general education and vocational training of the population, its cultural level, etc., as separate entities in the national wealth. It is also proposed that climatic conditions, etc., be counted as part of the national wealth. And what of the unique artistic and cultural assets that are contained in state public museums, galleries and libraries as well as in private collections?

The questions regarding the physical composition of the national wealth are numerous. Unified opinion probably exists only regarding the inclusion of productive and nonproductive fixed capital carried on the balances of state, public and cooperative organizations on regarding the inclusion of the population's domestic [bytovoye] property. But here, too, there is an absence of clarity on such questions as: how to appraise national wealth--according to the initial cost of construction, fabrication and acquisition; on the basis of total present (replacement) value or value less physical depreciation or obsolescence; whether to include among the national wealth summer cottages privately owned by the population or privately held cooperative cottages and private plots that are still not counted as part of the country's nonproductive fixed capital; whether to appraise the population's property in the retail purchase price or to exclude the turnover tax since the low apartment rent, the free schooling and the services derived from the social fund are not reflected in the national wealth and are not balanced with the value of the property.

Thus in the process of calculating the volume and composition of the national wealth, there arise numerous questions and variant solutions as a result of the absence of unanimity regarding them.

Societal wealth is the prerequisite to the planned continuity of the socialist reproduction process. It is specifically the functioning of society's wealth that ensures the unity and interaction of basic stages in the process of reproduction (production, distribution, exchange, consumption). At every given moment, the reproduction process is realized through the utilization of the resources of societal wealth. The annual gross (aggregate) social product is the result of the functioning of the production fund of societal wealth combined with the productive labor of material production workers. Since wealth and labor under socialism are directly socialized, the gross product is also the object of social socialist ownership and is used for the simple and expanded reproduction of wealth, for the satisfaction of personal requirements.

The branch structure of the gross social product is a factor in improving the structure of wealth; the latter in turn influences the branch structure of the gross product and is an active factor in its formation. Therefore, the volume, branch and physical structure of national wealth have an important practical relevance to the closely connected indicators of the gross social product and national income.

In their analysis of social reproduction, K. Marx and F. Engels repeatedly used "wealth" in a broad spectrum of aspects. They viewed this category together with its quantitative and qualitative characteristics, physical

structure and social form of movement under concrete historical conditions and in direct relationship with other categories of social reproduction [1]. In some instances, K. Marx used the term "wealth" as an antonym of "poverty" and in its application to labor and natural conditions, expressed their meaning in the reproductive process and in the abundance of available resources [2]. Consequently the term "wealth" is used to describe both economic phenomena and the state of natural factors and phenomena in the spiritual life of society. This provides room for differing interpretations of the economic concept of wealth whereas the scientific approach to its definition requires the precise delineation of the boundaries and spheres of application of a given category. The composition of national wealth is a question of more than purely academic interest. Depending on its theoretical solution, it is necessary to indicate and validate practical measures for appraising and planning national wealth.

The basic disagreement among political economists regarding the physical composition of national wealth reduces to whether to include in it the basic types of natural resources used by society (farm land, minerals, timber and water resources).

The political economy course prepared by the political economy department of Moscow State University im. M. V. Lomonosov with the participation of other MSU departments and scientists belonging to a number of organizations makes the following statement in its exposition of the role of natural resources in the reproduction of societal wealth: "The reproduction of wealth as the aggregate of accumulated products of labor is a process that is integrally connected to the use of natural resources. As such, they are not the object of societal wealth" [4]. This thesis is confirmed by the following formulation by K. Marx: "Everything that is not the result of human activity, the result of labor, is nature and as such is not social wealth." Further: "While not an economic category, natural resources are important as a factor of production and labor productivity. The higher the fertility of the soil, the greater the content of useful components in the ores, the more oil, gas and other types of fuel and raw material in the ground, ceteris paribus, the higher is the social productivity of labor which is the main factor underlying the growth of wealth. Therefore socialist society realizes the planned use, preservation and reproduction of natural resources" [4].

It remains unclear how the "preservation and reproduction of natural resources are realized without expenditures of social labor and why these labor expenditures are not reflected in the value of the natural resources that are used.

A political economy textbook republished in 1978 contains a section "Social Wealth and Its Composition" which states: "In a certain sense, natural resources (farm land, forests, water, mineral deposits) used in the production process can also be classified under the heading 'material wealth.' But since these material resources are untouched by human labor, they do not possess value" [15]. Here attention is focused on the argument that natural resources lack value, from which it follows that they can only be measured in physical terms.

The section entitled "Social Reproduction and National Wealth" of a political economy textbook published in 1978 notes: "Natural resources are an important element of national wealth and a condition to the development of social production. The expenditures of labor on the maintenance, transformation and reproduction of natural resources make them an element of national wealth created by labor" [6].

Finally, in a political economy dictionary, we read: "Under socialism, national wealth consists of material resources (the aggregate of means of production and consumer goods) created by the labor of previous and present generations and of natural resources that are drawn into economic use...Natural resources that have not yet been drawn into the process of socialist reproduction constitute public property that exists in the capacity of potential national wealth" [7].

Comparison of statements contained in political economy textbooks of different years regarding the place and appraisal of natural resources in the national wealth reveals points of basic disagreement between them even though all authors agree that national wealth is the sum of material objects in which social labor is materialized.

The first problem is to determine whether various natural resources used in material production contain social labor. Let us examine this question on the basis of the example of the major types of natural resources used in social production.

Agricultural land. Among natural resources, a most important place belongs to cultivated farm land, hayfields and pastureland. They have been in use for many centuries and for this reason the history of social labor's transformation of wooded areas and semideserts into land suitable for agriculture use has partly been forgotten. S. G. Strumilin's description of the cultivation of land to meet agriculture's needs is of considerable interest in this regard [8]. "As a result of nationalization following the October Revolution, land ceased to be a factor in national commerce. It can no longer be bought and sold on the market. Prices on land are also no longer tallied. It has come to be regarded as a free gift of nature like the water that flows in a river or like the air we breathe" [8]. "But we must not forget the price the agriculturalist paid to develop this gift of nature." "We recall," S. G. Strumilin writes, "that the development of the land in Western Europe among both the Slavs and Germans began with slash-and-burn agriculture. According to Tacitus, the landscape of Germany in the first century B. C. was "terrible forest or loathsome swampland." Naturally, our own primordial landscape appeared no less formidable to our ancestors--the Drevlyane, the Dregovich and various Drevodely. Long before their first sowing, they had to cut down the "terrible" forest and burn the "loathsome swampland" in order to dry it up. They had to repeat these arduous land-clearing processes in a new place every 2-3 years since the land they had already cleared became once more overgrown during this time and turned into land that would lie fallow for many years to come. It took 45 days to cut down a desyatina [2.7 acres] of timber (excluding stump removal) and another 45 days to burn off the felled trees. The total operation, including "tidying up" and plowing took at least 109 days per desyatina or 100 days per hectare (not counting sowing and harvesting). Thus each generation

of farmers in 30-40 years spent as much as 1000 man-days to develop every hectare of land. Under such conditions, such natural resources (i. e., cultivated farm land, hayfields and pastureland) can be called free only as a profound misapprehension" [8].

"To be sure," S. G. Strumilin continued, "as slash-and-burn agriculture gave way to the three-field system characteristic of feudalism, there was a sharp decline in the expenditures on the development of new farm land since this land did not revert to fallow that again became overgrown with trees. But for that, on the newly cleared land it was not only necessary to burn off new growth of timber but also to remove all stumps in order to cultivate the virgin land. And of course, all old farm land of equal quality that had been developed in previous centuries and years is evaluated on the basis of expenditures on the development of such new farm land.

In our time, S. G. Strumilin stated further, we have at our disposal vast Soviet statistical data on the cost of developing virgin and long-fallow land. Over a period of 7 years (1954-1960), 41.8 million hectares of virgin and long-fallow land were developed at state expense in the major regions of development of new land. Additional investments in the development of this land in excess of the usual capital investments are estimated at 4.4 billion rubles (according to the new price scale, i. e., 105 rubles per hectare). At the same time, fixed productive capital in the developed lands increased by 3.5 billion rubles during the same years. And if investments in structures and equipment in the virgin lands have already been fully taken into account in this productive capital, the price of development of the land proper--105 rubles--can incorporate only the remuneration of labor on its development." "However," S. G. Strumilin notes, "this is still not the full cost of development of the land since it should also include--in addition to the remuneration of labor--the existing accumulation norm. In the given instance, this norm was at least 57 percent throughout the entire national economy in 1958 since the wage fund of all workers and employees (not counting taxes and the remuneration of the labor of kolkhoz workers in that year was no higher than 60.2 billion rubles, while the increase in all fixed and working capital was at least 34.6 billion rubles. Consequently, the actual accumulation norm is $34.6 \text{ billion rubles} : 60.2 \text{ billion rubles} = 57.4 \text{ percent}$." "Thus," S. G. Strumilin concludes, "by the year 1958 the cost of land development in the USSR was on the average 165 rubles per hectare taking the accumulation norm into account" [8].

"Only the people's resources--already developed or in the stage of development--are of economic interest to us. But they cannot by any stretch of the imagination be called free. All of them acquire the price of their development. And these prices are thoroughly determined by the social cost of developing these resources. In every particular instance, these expenditures fluctuate greatly; however, in general their total production is subordinate to the law of value." "This holds true for all natural resources undergoing development" [8].

Between 1960 and 1979, labor productivity on sovkhozes increased by 67.3 percent and the average monthly wage rose from 53.8 to 146.0 rubles [10, 11], i. e., by 171.3 percent. Accordingly, under the conditions of 1979,

the price of developing land in Kazakhstan and other regions where this took place in the 1950's, should be reckoned as follows: $(105 \text{ rubles} \times 271.3) : 1.67 = 170.5$ rubles per hectare. The norm governing accumulations in the entire national economy in 1979 with respect to the relative growth of fixed and working capital (124.8 billion rubles) and the wages of workers and employees minus taxes levied on the population and the earnings of kolkhoz workers was approximately 58 percent. Thus, under the conditions of 1979, the total cost of developing virgin soil would be 170.5×158 percent = 269.3 rubles per hectare. If we conditionally extend this cost of developing a hectare of virgin land to the entire area of cultivated land in our country (226.3 million hectares as of 1 January 1980), its total value could be set at 60.4 billion rubles.

If we evaluate the cost of developing hayfields (35.1 million hectares), pastureland (286.1 million hectares) and orchards and vineyards (4.8 million hectares) as 50 percent of the cost of developing tillable land (as proposed by S. G. Strumilin), it can be taken in the sum of 44.0 billion rubles. Thus, when computed according to the cited method, the total value of all agricultural land in use in the USSR on 1 January 1980 is approximately 104.4 billion rubles.

This conditional valuation of agricultural land in use is based on raw data on the cost of development of virgin and long-fallow land between 1954 and 1960 in Kazakhstan, Siberia, the Volga region and the Urals and can hardly be extended with certainty to all the rest of the farm land in the USSR. Obviously the cost of developing a hectare of virgin and long-fallow land could be lower in the South which is predominantly steppe and could be higher in the forested regions of the Southwest, the European North, the West and Center.

However, it should be considered that under modern conditions, given the use of electric saws and stump-removal machines capable of removing up to 30 stumps an hour and of clearing a hectare in a maximum of 45 hours, the difference in the cost of developing various types of virgin and long-fallow land is not as great as in the past. And after all, the evaluation of farm land in use must be made under modern conditions, in its application to fixed capital in the national economy, periodically subject to all-union reappraisal in replacement prices and presently counted in 1973 prices irrespective of the date it is put into operation.

As T. S. Khachaturov notes in connection with land valuation, a higher land valuation when multiplied by general land area will lead to an unconscionably large share of land in the national wealth. For example, the average valuation of a hectare of agricultural land (1,000 rubles according to some computations) multiplied by the total area of 609 million hectares yields a total land value of 609 billion rubles, which is clearly too high when compared with the value of all productive capital in the USSR national economy (which presently amounts to 868 billion rubles.--L. Z.). For the sake of comparison, T. S. Khachaturov notes that the value of U. S. farm land in 1958 was \$88 billion, taking differential rent into account in national wealth of \$1791 billion (in current prices). In prerevolutionary

Russia, land was valued at 90.4 billion gold rubles [12]*, i. e., was 1.63 times higher than the latter, which was characteristic of the conditions of the agro-industrial character of the Russian capitalist economy.

In the opinion of T. S. Khachaturov, the evaluation of agricultural land obtained by S. G. Strumilin (82 billion rubles) is considerably closer to reality than that cited above [13]. This evidently also applies to M. N. Loyter's evaluation of farm land on the basis of differential rent (320 billion rubles) [14, Chapter XV], which comprise 37-40 percent of the value of all fixed productive capital. Our approximate valuation of farm land on the basis of expenditures on its development applicable to the conditions of 1979 is 9.7 percent of the cost of fixed productive capital in the national economy.

Naturally, the approximate valuation we cited regarding utilized agricultural land could be refined. However, the most important point can be considered proven: the proposition that utilized tilled and other agricultural land is not identical to the gifts of nature, while land that is made suitable for use in material social production as a result of enormous expenditures of labor must accordingly have appropriate valuation in labor and value (monetary) terms in order that it might be included in the national wealth of the USSR.

Mineral resources. With the development of social production, there has been an increase in the significance of mineral resources among other natural materials in the capacity of objects of labor and primary energy sources.

K. Marx wrote that from an economic point of view, natural resources are divided into two large classes: "natural wealth in the form of means of subsistence, consequently, the fertility of the soil, the abundance of fish in the water, etc.; natural wealth in the form of means of labor: existing waterfalls, navigable rivers, forests, metals, coal, etc. In the initial stages of a culture, In the initial stages of culture, the first type is of decisive importance; in the later stages, the second type of natural wealth is the most important" [1, Vol 23, p 521]. This premise of K. Marx is confirmed by the rapid development of the mining industry and the sharp rise in the share of mineral raw materials and fuel in the total production of primary materials and products. In the USSR, the share of the extractive industry in 1960 was 57.5 percent; 62.2 percent in 1965; 69.0 percent in 1970; 70.1 per cent in 1975; and 70.2 percent in 1978. Approximately 90 percent of heavy industry's output consists of mineral raw material [15].

The country's surveyed reserves of coal and iron ore are expressed in colossal figures: overall forecast coal reserves are estimated at 8.7 trillion tons, including 2.2 trillion tons that are minable given the present level of technology. In 1968, surveyed balance-sheet reserves amounted to 525 billion tons, including 261 billion tons in categories A+B+C. General balance-sheet reserves of iron ore exceed 100 billion tons; surveyed reserves in categories A+B+C amount to 60 billion tons [16].

*Given the value of the reproducible part of national wealth: 55.6 billion rubles.

The mineral-raw material base of nonferrous metallurgy is represented by large deposits of copper, lead, zinc, tin, nickel, cobalt, molybdenum, tungsten, etc. At the present time, 70 of the elements in Mendeleev's periodic table are used in production.

The mining-chemical industry has a raw material base that is estimated at 2 billion tons of apatite ores in categories A+B+C on the Kola Peninsula, 3 billion tons of surveyed phosphorite reserves, and 3.8 billion tons of potassium salts (computed in terms of potassium oxide).

The mining industry, which determines the economic potential of modern society, is developing at a rapid rate. Extraction computed in terms of standard fuel (7000 kilocalories) increased from 692.8 million tons in 1960 to more than 2 billion tons in 1980, including crude oil (including gas condensate--from 147.9 to 603.6 billion tons; natural gas--from 435.3 to 435 billion m³; coal--from 509.6 to 716 million tons; while the extraction of commercial ore correspondingly rose from 105.9 to 241 million tons and the extraction of manganese ore increased from 5.9 to 109.2 million tons [17]. Taking into account the possible scale of extraction in the future, Soviet industry has at its disposal surveyed reserves of coal in categories A+B+C for approximately 100 years. Forecast reserves of oil in our country are quite large and there is not and will not be any need to import it [18].

Minerals in their primary state prior to being extracted from the ground are not subjected to any manner of processing, their material form does not change and upon being extracted are transformed into raw materials. Nonetheless, there are enormous expenditures of social labor on exploratory and geological prospecting work, on determining the capacity and character of deposition of various types of minerals, on mapping, on industrial assaying, on the classification of minerals according to degree of exploration for the purpose of determining the technical feasibility and economic expedience of their industrial use. Expenditures of labor associated with these measures comprise 1-2 percent of the value of the coal and up to 40-50 percent of the value of the oil extracted. Even though they do not have any influence whatsoever directly on minerals in the ground, is it possible in this regard not to consider socially necessary expenditures of labor associated with the search for mineral deposits, with the study of their character in terms of mineralogical and other properties, with the determination of their economic expedience on the basis of semi-industrial assays, with the study of the thickness of deposits based on drilling operations, and with the determination of the possible volume of annual extraction.

Such expenditures of social labor have a preparatory character for the technical and economic design of future wells, mines and quarries, expenditures on which will be part of the cost. Studied deposits acquire a definite value that is equal to expenditures of socially necessary labor on their investigation. These expenditures presently comprise approximately 3 billion rubles a year. Inevitably, some exploratory and geological prospecting work does not produce results and the cost of this work should be charged against similar efforts that are successful, against those that are carried on a balance sheet, against mineral resources of the All-Union Geological Fund.

Until recently, the cost of extracting mineral raw materials did not include outlays on geological exploration and geological exploration and on other aforementioned measures of that character. Since 1967, these expenditures are included fully in the cost of extracted oil and natural gas and partly in the cost of coal, iron ore, and nonferrous metals (the part of operating costs associated with the depletion of natural resources). Wholesale prices that took effect on 1 January 1982 and calculations of the enterprise cost of production of all types of natural raw materials include all outlays on geological exploration, geological prospecting and other work performed by the Ministry of Geology. Thus, henceforth the given expenditures will be excluded from the state budget and included in the cost-accounting economic indicators of the extractive branches.

Can minerals be considered as transformed into mineral raw material after geological exploration and prospecting operations have been completed? After all, these operations produce no change whatsoever in the state of these gifts of nature. The fact of the matter is that the use of minerals in social production presupposes obligatory "preparatory" expenditures in order to understand their volume, state of properties and like features that must be determined in order to ascertain the suitability of a given, concrete deposit for industrial use. Do these surveyed resources acquire value following the appropriate geological exploration, geological prospecting and other allied work? This question should be answered in the affirmative. And since these expenditures are made not in the process of extraction of the mineral resources but significantly earlier, in anticipation of the extraction process, it should be admitted that as a result of geological exploration and prospecting work on natural resources, the latter acquire value. They become known to social production and this distinguishes them from other: not yet known natural resources.

In the opinion of N. A. Khrushchov, mineral reserves in category A+B+C and some types of mineral reserves in category C₂ that are carried on the balance of the All-Union Geological Fund, that are the basis of social production in the mining industry, that are the objects of its labor and its reserve [9] should be evaluated in monetary terms as part of the national wealth.

N. A. Khrushchov estimated surveyed mineral reserves on the basis of expenditures on geological exploration and prospecting work performed with the aim of obtaining the necessary data on surveyed reserves roughly at the beginning of 1974 in the sum of 50 billion rubles, from which 10 percent had to be excluded in view of the fact that some of the surveyed resources were already depleted [19]. At the beginning of 1980, these expenditures amount to roughly 65 billion rubles (excluding some of the already depleted reserves).

The evaluation should also include some of the exploitation costs regarding the determination of mineral reserves, conditions of their deposition, their physical and chemical composition regarding the total volume of minerals that are still in the ground. Taking these corrections into account, the value of minerals in the ground in the USSR at the beginning of 1980 can be set within the range of 68-70 billion rubles.

Thus, according to the evaluation of surveyed reserves of mineral resources that the Soviet Union has at its disposal on the basis of this method, they comprise 4.3 percent of fixed capital (1638 billion rubles).

Timber resources are reproducible and society must expend considerable labor on their preservation and reproduction. Every year, about 2.4 million hectares are reforested and afforested and forest management measures are implemented on 46-47 million hectares; improvement-selective logging is carried out on 4.0 million hectares. As a result of systematic reforestation, afforestation and continuing natural growth, the nation's timber stand is not only not diminishing but continues to increase notwithstanding the systematic harvesting of timber for productive needs by the extractive branch. According to a timber census, on 1 January 1966, 746.8 million hectares were covered with forest (33.4 percent of total USSR territory) while the overall reserve of forest plantings was 79.7 billion m³; on 1 January 1978, 791.6 million hectares were covered with forest (35.6 percent of total USSR territory) and the reserve of forest plantings increased to 84 billion m³ [11].

Timber resources are one of the basic types of natural resources of the Soviet Union. They play a large part in the nation's economy as a source of one of the most common types of raw material--wood--and as a factor of major importance with regard to the protection of water and soil, to farming and to sanitation.

The full economic valuation of timber must reflect all its diverse functions. The significance of the forest as a natural resource is not limited to the fact that it is the raw material base for the timber industry and is the source of wood as a raw material. The forest at the same time also performs a number of diverse functions, the basic ones of which are the following:

--is one of the key factors in maintaining the normal state of the atmosphere, in preserving the oxygen balance and in the regeneration of the air; of all earth's vegetation maintaining the planet's biomass (in terms of the quantity of the biomass), forests account for 54 percent [21];

--is highly relevant to the recreation and rehabilitation of the working people; the growth of urbanization increases the significance of forests as a place of recreation, tourism, prophylaxis and treatment for citizens of the USSR;

--performs extremely important water-protection, soil-protection and agro-technical functions; the water-protection role of the forest acquires ever greater significance in connection with the strained water balance in a number of regions in the European USSR;

--the forest serves as the source (in addition to wood) of a large number of other valuable types of products (furs, medicinal and technical plants, resin, wild berries, seeds, mushrooms, etc.).

However since the methods used to evaluate multiple functions of the forest have not been developed, the evaluation of this type of resource must be expressed only through one of its functions: the procurement of timber and therefore the economic valuation of the forest and forest land is slightly reduced.

In forestry, the forest and the land it occupies are not only objects of labor but are at the same time also means of labor. The current valuation of forest (not counting land) is determined by socially necessary outlays on afforestation and reforestation. At the same time, it is important to note the slightly different composition of expenditures on the development and reproduction of resources in forestry in comparison with agriculture and branches of the extractive industry. This distinction consists in constant expenditures on afforestation and on the protection of the forest against fire. The revenues from its use include stumpage payments charged for felling timber, natural growth and consequently the increase in the value of stands of timber. The forest taxation established in 1949 is based on the principle of compensation of forestry expenditures. In addition to logging costs, stumpage payments include the cost of the product created for society by persons employed in forestry.

According to rough estimates by P. V. Vasil'yev [20] based on a possible increase in the exploitation of forests to 450 million hectares (out of the total forest area of 791.6 million hectares as of 1 January 1968) and the level of stumpage payments of 1.8-2.0 rubles per m^3 , the overall value of the nation's forests is reckoned at 90-100 million rubles given an average price of 200 rubles per hectare of forest.

The system of taxes on the sale of timber is unsuitable for the valuation of standing timber if only because standing timber is not only timber but also the land beneath it and the entire complex of non-wood resources that are reproduced in the forest.

Forests are an environment for the natural reproduction of feed and food resources and are the source of 70-80 percent of the fur-bearing animals procured. Many regions of the forest are capable of providing non-wood assets that are worth more than the sum that can be obtained from the sale of wood.

Considering the worth of the previously noted additional values of timber resources, their overall value is conditionally set at 100-110 billion rubles.

The 11th Five-Year Plan will ensure the gradual transition to forest management based on continuous and rational use. The plan calls for growing at least 8 million hectares of young species of valuable trees and for introducing industrial afforestation techniques. A special afforestation program will establish a permanent raw material base for the pulp and paper industry in the European-Ural zone of the nation. Consequently, there are plans for the considerable expansion of measures for the reproduction of forests in the USSR.

Water resources. The USSR leads the world in river runoff (4300 km^3 a year). Under present conditions, the quantity of water passing through our rivers is approximately $20,000 \text{ m}^3$ per inhabitant of the USSR; only 1400 m^3 are expended, including about 900 m^3 that are irretrievably lost (evaporation, transpiration of agricultural plants, etc.). Nonetheless, the distribution of water resources throughout the country's territory and in time is unfavorable. Thus in the European part of the USSR, where almost 80 percent of the population is concentrated, where most of the industrial production is located, and where there is a considerable effort to irrigate agricultural land, river runoff is less than 20 percent of the total quantity. The high degree of concentration of industry and the population leads to a shortage of fresh water in the Donets and Krivoy Rog basins, in the Urals, and in the central regions of the USSR. The shortage of water is most keenly felt in these regions in drought years when the water in the rivers drops to almost one-third of the average monthly level. A considerable disparity between the need for water to irrigate farm land and water resources also exists in the Central Asian republics of the USSR. Accordingly, it is planned to redirect part of the runoff from Siberian rivers to Central Asia and Kazakhstan and part of the runoff from northern rivers into the Volga basin. The implementation of these measures will require large capital investments and will take a long time, M. N. Loyter notes that this will essentially mean the reproduction of water resources for regions whose natural location does not guarantee the uninterrupted supply of water to satisfy all needs associated with the economy's development. [14, Chapter V].

In addition to this, the discharge of untreated sewage from industry, agriculture and the public utilities pollutes the catchment basins and limits the volume of fresh water resources to an even greater degree. As a result, already in the next 15-20 years there may be shortages of pure, fresh water not only in some industrial centers and regions but also in river basins including the basins of the Syrdar'ya and Amudar'ya, Terek and Kuban', Don and Dnepr, and other rivers. The lessening of the flow of water into inland seas--the Caspian, Aral and Azov--has already been highly detrimental to the national economy and these losses may be still higher in the future.

Consequently, highly developed production means that water resources cease to be an unlimited gift of nature and that their use as a productive force requires special measures regarding the regulation and redistribution of runoff and that water must be made to meet proper quality standards.

Over 78 percent of our farm land, approximately 65 percent of our tilled land, half our hayfields and 93 percent of our pastureland are situated in moisture-deficient regions.

All these areas must be improved and restored, their fertility must be increased, and they must be protected against wind and water erosion. Following the May (1966) Plenum of the CPSU Central Committee, which proclaimed long-range reclamation, the area of irrigated and drained land doubled and reached almost 35 million hectares. The 11th Five-Year Plan provides for state capital investments to activate 3.4-3.6 million hectares of

irrigated land and 3.7-3.9 million hectares of drained land and to irrigate 26-28 million hectares of pastureland in desert, semi-desert and mountainous regions. During this period, construction work will commence on the fourth phase of the great Stavropol' Canal, on the third phase of the North Crimean Canal and the first phase of the Azov irrigation system. Construction work on the Danube-Dnestr irrigation system and the second phase of the Dnepr-Donbass Canal will continue. New networks of water mains will be laid in Kazakhstan. Work will also continue on the development of the Karshinskaya and Dzhizanskaya steppe in Uzbekistan. Various types of water engineering operations are slated for practically every region of the nation. Existing reclamation systems will be rebuilt and their water supply will be improved.

Preliminary estimates of the price of water show that taking into account direct operating costs, amortization allowances for fixed capital in water resource management*, charges for using water (conditionally 5 percent of its value), the profit of water management enterprises (conditionally 5.5 percent of the value of capital) and necessary expenditures to compensate water losses (conditionally in the amount of annual investments in the construction of reservoirs), the price per m^3 of water delivered to (or taken from) the field, farm, shop or home is approximately 1 kopeck per m^3 , including direct operational losses of water management systems--0.18 kopecks, amortization allowances for fixed capital in water management systems (2.5 percent of the value of fixed capital) and compensation for water losses (0.25 kopecks per m^3 of water irretrievably consumed and lost)--0.08 kopecks; in all--0.55 kopecks. In addition, the profit of water management systems (5.5 percent of the value of fixed capital)--0.55, including payments for the use of fixed capital (5 percent of their value); in all--1.10 kopecks per m^3 of water [14].

Such dimensions of annual payments corresponded to the level of water consumption and water use in the mid-1960's. With the increase in the scale of water management construction and the activation of new water management capital, they will grow in corresponding measure. Therefore, in the subsequent calculation, the author considers the price of a m^3 of water to be 1.5 kopecks; the overall value of the annual volume of water used in the national economy is approximately 20 billion rubles (while the total annual runoff is approximately 85 billion rubles) [14].

During the years of the 10th Five-Year Plan, more than 9.2 billion rubles in capital investments were channeled into environmental protection and measures designed to secure the rational use of natural resources. Current outlays on the operation of nature conservation facilities were also significant. Thus in 1978 more than 2.7 billion rubles were expended on these purposes by industrial enterprises alone.

*The calculation includes only fixed capital whose value can be included in the price of water; e. g., for water power--only reservoirs; and for water transport--hydraulic engineering structures.

The broad nature conservation program implemented by enterprises and associations of USSR ministries and departments and by city and oblast Soviets of Workers' Deputies helps to preserve the natural environment and promotes the reproduction of natural resources. This process of reproduction is many-sided. It is expressed in the more complete extraction of minerals, some of which were previously discarded instead of being utilized; in the deeper extraction of useful components from mineral ores with a lower content of extractable elements; in the expansion of tillable and pasture land through meliorative measures in the form of drainage, irrigation and recultivation of land that has deteriorated into unusable condition, the protection of land against wind and water erosion through the planting of trees and forest conservation measures and through the purification of polluted water resources, through increases in the capacity of water recycling systems, and through the accelerated construction of water conservation facilities. Limited nonrenewable resources gradually become renewable as a result of the recycling of one and the same raw material.

Thus, according to the valuations cited above, the value of the basic types of utilized natural resources and their general approximate valuation at the beginning of 1980 was: agricultural land--104.4 billion rubles; minerals--68-70 billion rubles; timber resources--100-110 billion rubles; water resources--20 billion rubles; and total--approximately 300 billion rubles. With respect to the value the national economy's productive capital which is 1076 million rubles not counting depreciation, the value of utilized natural resources is approximately 28 percent ; vis-a-vis total national wealth of the USSR--10.7 percent*.

But if we consider productive fixed capital minus their physical depreciation, which was 25 percent based on the reappraisal of fixed capital as of 1 January 1960 and 26 percent as of 1 January 1972 (the amount of depreciation has evidently changed little to date), its value on 1 January 1980 will be expressed in the sum of 807 billion rubles; the value of all fixed capital was 1369 billion rubles; including the value of land and timber--1670 billion rubles. Then the overall volume of national wealth will be 2.5-2.6 trillion rubles and the share of natural resources in the overall value of national wealth will be 11.5-12.0 percent.

Of late, much attention has been devoted to the evaluation of utilized natural resources based on differential rent I. The aim of this evaluation was to secure the most rational use of natural resources. The naturally conditioned differentiation of the effectiveness of the utilization of various sources of similar (interchangeable) natural resources is the objective prerequisite to this economic evaluation.

*According to the USSR Central Statistical Administration, at the beginning of 1980 national wealth (not counting the value of land and timber) was 2.5 trillion rubles and including the value of utilized natural resources according to our estimate--2.8 trillion rubles.

In accordance with the draft of the "Basic Principles of Methods Used in the Economic Evaluation of Natural Resources in Mass Project-Planning Calculations" elaborated by the Central Mathematical Economics Institute of the USSR Academy of Sciences with the participation of the commission for the study of the productive forces and natural resources under the Presidium of the USSR Academy of Sciences under the supervision of N. P. Fedorenko and K. G. Gofman, branch and interbranch methods are presently being developed for the economic evaluation of natural resources and they are being evaluated accordingly.

According to these methods, economic evaluations are to be made of all natural resources, the reduced availability or altered natural properties of which will be detrimental to socialist society not only in the immediate planned future but also in the foreseeable future. Therefore, the object of economic evaluation is both natural resources that have already been drawn into use but also those that will be exploited only in the future (potential resources), including types of potential resources which cost little or nothing to develop in the past (virgin forests, scenic landscapes, etc.).

The economic evaluation of a given mineral deposit, of land, of timber and other types of natural resources is based on "maximum allowable costs", i. e., the evaluation is based on socially necessary expenditures on the "worst" deposit or sector, the use of which is dictated by the social need for a given type of natural resources. The evaluation of additional resources, the quality and similar properties possessed by the remaining utilized deposits, massifs and sectors is added to these "maximum allowable costs." Consideration is also given to the difference in transport costs to the point of consumption of a given raw material, i. e., differential rent I is determined. The more fertile a given mass of land, the richer a given deposit is in minerals, the taller the trees and the better their species, the more abundant and purer the water, the higher is the differential rent vis-a-vis the "maximum allowable costs." The same also applies to transport costs: the lower they are, the higher is the differential rent.

Thus the evaluation of natural resources on the basis of differential rent differs from their evaluation on the basis of the above-examined expenditures of social labor for bringing them into a state suitable for use and reproduction (agricultural land, water), for determining their suitability and profitability for industrial use (minerals), and for their reproduction and protection (land resources, farm land, water). Therefore, in evaluating a country's national wealth, it is necessary to consider the richness of utilized natural resources on the basis of an analogous evaluation, like the value of the national economy's fixed and working capital, i. e., on the basis of their evaluation on the basis of expenditures of social labor.

The difference between the evaluation of natural resources on the basis of differential rent and on the basis of direct expenditures of social labor is very significant. According to the tentative evaluation of economists, the total national economic value of the aforementioned basic natural resources is approximately 2 trillion rubles [22], of which almost 1 trillion rubles [14] are presently used at the present time instead of

the 300 billion rubles calculated on the basis of direct expenditures of social labor. Nonetheless, it is impossible to make a direct summation of the value of natural resources computed on the basis of differential rent I with the full balance-sheet value of fixed and working capital evaluated by the USSR Central Statistical Administration in comparable 1973 prices and on such a mixed basis to determine the overall volume of national wealth [14]. For this reason, it is also erroneous to conclude that "the economical evaluation of natural resources (i. e., on the basis of differential rent.--L. Z.) makes it possible to consider the magnitude and structure of national wealth more completely" [23]. Only the calculation of all elements of national wealth according to uniform methods can provide a correct overall evaluation of their volume and structure. Since the value of fixed and working capital is reckoned on the basis of the evaluation of expenditures of labor, in the calculation of all national wealth, natural resources should also be evaluated according to these same methods.

The problem of the national wealth of the USSR has attracted more and more attention of late. Nonetheless the study of patterns in the dynamics and change of the structure of national wealth lags behind these tasks. Back in 1964, an interrepublic conference on the reproduction of the social product and national income recognized the dire necessity of making necessary use of the volume, structure and dynamics of national wealth of union republics and recommended methods to be used in their calculations. The study of the problem of national wealth presupposes the need--in addition to examining theoretical questions on the economic content of this category, its role and place in the system of reproduction categories--to make a systematic analysis of the general magnitude and structure of the national wealth of the USSR and of the union republics today; the patterns of its formation; the determination of practical ways of improving methodology and the organization of its planning and accounting.

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REGIONAL DEVELOPMENT

ROLE OF STATE ARBITRATION ORGANS IN TERRITORIAL PRODUCTION COMPLEX DEVELOPMENT

Moscow KHOZYAYSTVO I PRAVO in Russian No 12, Dec 81 pp 14-18

[Article by N. Sapozhnikov, chief state arbiter for the RSFSR: "Territorial Production Complexes--for the Attention of State Arbitration Boards"]

[Text] One of the characteristic features of the development of the socialist economy at the present stage is the formation of territorial production complexes (TPC). The creation and functioning of a number of such complexes is provided for by the "Basic Directions of Economic and Social Development of the USSR for 1981-1985 and for the Period to 1990." Among them there could be named the very large South Yakut [Yuzhno-Yakutskiy] TPC, being created in the zone of the Baykal-Amur Main Line, the Western Siberian Petroleum-Gas Complex, the Kursk Magnetic Anomaly Complex, the Kansk-Achinsk, the Bratsk-Ust'-Ilimsk and others.

The formation of TPC constitutes a new direction in the practice of socialist management. It is meant to provide a most complete regional organization of production, comprehensive development of the resources of the corresponding regions, increased effectiveness of capital investment and acceleration of the rate of growth of labor productivity. For these ends, in addition to the creation of new production facilities and sectors of the economy, provision is made for bolstering of the construction base and increasing housing, social-cultural and road construction in the regions of TPC development.

In his report at the 26th CPSU Congress, Comrade L.I. Brezhnev directed attention to the need "to better manage territorial production complexes, to better take into consideration and combine regional and sectorial interests." An important role in solution of problems of successful establishment and development of TPC is meant to be played by law-protective organs, including state arbitration boards. In the light of the decisions of the 26th CPSU Congress and the targets of the 11th Five-Year Plan, an important duty of arbitration organs is direct local participation in the creation and successful functioning of complexes.

USSR and RSFSR state arbitration boards and heads of regional state arbitration organs are constantly engaged in organizational work relating to direction of the efforts of arbitration personnel in assisting the development of TPC.

Attention was directed to this work of arbitration organs by an order of the chief state arbiter for the USSR of 21 May 1981 No 6 "On Tasks of State Arbitration Organs in the Light of the Decisions of the 26th CPSU Congress" and a decree of the collegium of the RSFSR State Arbitration Board of 7 April 1981. The long-term and current plans of arbitration boards provide for various measures in this direction. Arbitration boards exert a most significant level influence on the fulfillment of programs of creation of TPC in the course of resolution of economic arguments involving the participation of industrial, construction, transport and other organizations. In examining arguments, state arbitration organs attempt to establish optimal operational ties among the parts of the complex and to provide stable cooperation of related production operations. Every possible assistance is provided through legal means for the clear-cut and timely performance of duties connected with the planning, construction and material-technical supply of installations forming part of a TPC.

One of the chief problems in the establishment of TPC is ensuring integrated development of the corresponding regions. Practice shows that this requirement is frequently violated. Organizations and enterprises of tens of ministries participate in the establishment and development of TPC. Frequently, significant difficulties arise as the result of estrangement and a narrow bureaucratic approach to construction problems.

The press points out cases of nonintegrated building up of cities and settlements in TPC zones. As the result of a bureaucratic approach on the part of certain ministries in planning of city construction first-priority needs are not taken into consideration. Insufficient attention is paid to municipal-service facilities, general city cultural and educational institutions and nature protection measures. A similar picture is being created in connection with children's preschool institutions and housing. Such defects are characteristic of a number of developing residential centers of the Sayan, Western-Siberian and Orenburg complexes.

Arbitration organs are meant to actively deal with such phenomena. For example, the position of the state arbitration board of Krasnoyarskiy Kray should be considered. In the course of examination of a dispute, it was established that the project of building up the Abakan industrial hub (Sayan TPC) provided for the construction of joint facilities for two chief customers. These general key structures include in particular a TETs, water-supply installations and transport communications. The Ministry of Nonferrous Metallurgy, however, held back transfer of funds for the shared participation in the construction of the facilities. The state arbitration board directed the report to the proper administrations of the ministries on the need for timely allocation of funds for the integrated construction of municipal and other facilities and informed the party organs of the kray.

In resolving disputes according to the agreements of the contract for capital construction, arbitration organs have the duty of supporting in every possible way the demands of ordering clients relative to the volumes and times of construction of facilities in accordance with plan targets. In the disclosure of cases of unfounded exclusion from plans of the construction of buildings

and structures needed for the integrated development of a TPC, prescribed measures should be adopted for rectification of the situation. Constant attention should be paid to the completeness of the planning estimates being prepared for each facility, including those of social and cultural-everyday use and timeliness of its presentation to the ordering customers.

Generalized studies show that some enterprises decline to make products for the construction of TPC facilities. For example, a dispute of the Tyumen' Construction-Machinery Plant with the Energotekhhkomplekt administration was received for examination by the state arbitration board of Tyumenskaya Oblast. It was established that the plant was refusing for different reasons to conclude an agreement for delivery of concrete mixers intended for use at a number of important sites of the Western Siberian Petroleum-Gas Complex. The arbitration board in its decision forced the plant to conclude a contract in conformity with the delivery plan. All state arbitration organs have to maintain such a policy of active influence on fabricating enterprises for the purposes of satisfying valid order of clients.

An important economic and legal problem is provision of punctual and regular supply of necessary equipment and materials to construction and production organizations of TPC. Practice shows that nonfulfillment or improper fulfillment of contracts for delivery of products to organizations located within the TPC zone has a negative effect on the solution of tasks of development of complexes as a whole. Thus, in 1980 railroad-tie impregnating plants repeatedly failed to comply with delivery periods of ties to organizations of the BAM [Baykal-Amur Main Line] construction industry.

Arbitration organs in recent years have increased pressure on enterprises and organizations permitting disruptions of targets and commitments for the construction and material-technical supply of facilities coming under TPC. The state arbitration boards of Buryatskaya and Yakutskaya Autonomous Republics, Krasnoyarskiy Kray, Belgorodskaya, Kurskaya, Omskaya, Orenburgskaya and Tyumenskaya oblasts and others have actively started to utilize granted rights and the power of the law for dealing with disclosed law violations. It is enough to point out that at the present time these or those sanctions provided by the law are being applied to guilty operational organs directly on the initiative of state arbitration boards for each third settled case.

Considerable work is being done by state arbitration boards on activation of cases on their own initiative in the interest of client organizations in connection with disclosed cases of violation of times and quality of construction work. Thus, the state arbitration board of Irkutskaya Oblast on the basis of information obtained from the oblast office of Stroybank USSR on cases of derangement of start-up periods of a number of production facilities by the construction organizations of Glavvostoksibstroy Main Administration initiated action and penalties in the amount of 216,000 rubles of sanctions. The state arbitration board of Buryatskaya ASSR in the first half of 1981 alone instituted on its own initiative 16 cases and penalized contracting construction organizations with 140,000 rubles of fines and penalties for violation of commitments relating to capital construction.

At the present time, state arbitration boards are not limiting themselves to forfeit penalties but are establishing control over actual elimination of violations and fulfillment of contracts. For example, the state arbitration board of Tyumenskaya Oblast on the basis of materials of the office of Stroybank USSR instituted a case for violation of the time of completion of construction by Tyumen'gazpromstroy Trust in 1980 of capacities of the Dem'yan-skoye Petroleum Pumping Station on the route of Nizhnevartovsk--Kuybyshev--Kurgan petroleum pipeline. The reason for failure to fulfill the work on time, as established, was lack of provision of the facility with a work force and delays in the supplying of materials. The trust was penalized with a fine of 54,000 rubles. At the same time, the state arbitration board established monitoring of completion of the work. Because of a delay in construction, a new case was initiated and the trust was penalized another 27,000 rubles. Systematic application of sanctions forced the trust to send workers and equipment to this facility and ensure the start up of petroleum storage facilities in March 1981. Such measures are exercised by every state arbitration board of the Russian Federation.

The decree of the USSR Council of Ministers of 23 January 1981 No 105 "On Receipt for Operation of Completed Facilities by Construction" established that facilities of production designation completed by construction were being accepted for operation if they had been prepared for operation (provided with operational cadres and supplied with energy resources, raw material and the like), unfinished work was taken care of and production was started on the installed equipment or services were being provided as designated by the plan. Facilities cannot be accepted for operation if these or those structures have been excluded from start-up complexes provided by plan in violation of the prescribed procedure. Consequently, in cases where arbitration organs have at their disposal data to the effect that a facility has been accepted with such violations, such an acceptance would have to be considered ineffective. Arbitration organs should on their own initiative institute cases on penalizing contracting construction organizations with forfeits for lateness in turning facilities over for operation.

State arbitration organs have increased pressure for legal work of enterprises and organizations in the regions of development of TPC. Planning of appropriate measures is done with account being taken of analysis of statistical data describing the condition of state discipline in the work of operational organs. Facilities requiring first-priority attention are determined on this basis.

For example, a considerable number of disputes relating to conditions of concluded contracts involving the participation of construction organizations of the USSR Ministry of Installation and Special Construction Work and the USSR Ministry of Construction of Heavy Industry Enterprises engaged in the construction of facilities at the Kursk Magnetic Anomaly were received by the state arbitration organ of Belgorodskaya Oblast. Their study showed that disputes were frequently due to the low quality of the concluded contracts and the existence in them of imprecisely formulated and nonconcrete points as well as defects in the arrangement of the contracted work. The state arbitration board familiarized itself with the drafted texts of contracts for 1981 prepared

by a number of construction organizations and proposed to introduce more precise definitions and additions. Communications were sent to the heads of the organizations on the question of improvement of work relating to the conclusion of contracts. The measures adopted on the initiative of the state arbitration board contributed to the improvement of operational contractual relations in capital construction.

In addition to the traditional ways of influencing legal work, arbitration units make wide use of the new forms provided by the Law "On State Arbitration in the USSR." For example, in accordance with article 23 of the Law, they become acquainted at organs of operational management, associations and enterprises with the practice of using legislation in the conclusion of contracts and performance of obligations and also examine jointly with institutions, enterprises and organizations questions connected with elaboration of measures for the prevention and elimination of violations and defects in their operational activity revealed by the state arbitration unit. Experience attests to the high effectiveness of such forms of preventive work.

The state arbitration board of Khabarovskiy Kray together with the Department of Justice in June 1981 studied the state of contract grievance work in subdivisions of the Ural UralBAMtransstroy Transport-Construction Trust. On familiarizing themselves with it, significant defects in the organization of legal work were disclosed. Thus, duties relating to conclusion of contracts and monitoring of their performance had not been assigned to specific persons. Times of notification of grievances and of replies to the grievances by contractors were consistently not being adhered to and their lawful demands unjustifiably remained unsatisfied. Because of the defects in the contractual and legal work, nonproductive expenditures for payment of forfeits and fines, debtor indebtedness and shortages of physical assets were great.

On the basis of the results of the study by the state arbitration board and the Department of Justice, a conference was held with responsible personnel of the trust's construction organizations at which reprimands were made addressed to them. It was recommended to adopt measures for improving the organization of legal work in the light of the requirements of the decree of the CPSU Central Committee on legal work in Irkutskaya Oblast and to strengthen the juridical service. In addition seminars were held on the study of new statutes on deliveries of products and goods, instructions on the manner of accepting products and goods in regard to quantity and quality. All this has contributed to an improvement in the use of legal resources in the work of the trust.

Arbitration organs are devoting considerable attention to an analysis of the causes of violation of plan targets and contractual obligations by associations and enterprises in the zone of TPC and are active in introduction of proposals relating to the prevention of such violations. Thus, the state arbitration board of Yakutskaya ASSR examined in 1981 six cases on suits of BAMstroyput' Administration instituted against construction management of South-Yakut Coal Complex a penalty with a 27,000-ruble fine for failure to provide planning estimates for the construction of a number of facilities. The state arbitration board did not restrict itself to the application of prescribed

accountability to the violator; it sent a communication to the construction management demanding elimination of the defects and punishment of the specific guilty parties. The construction management implemented the necessary measures.

State arbitration units systematically inform party and soviet organs on observance of state discipline and the condition of legal work at enterprises and organizations. The sending of such information is of special importance in regard to the implementation of complex programs. For example, the state arbitration board of Komi ASSR on the basis of a generalization of materials of disputes sent to the Komi ASSR Council of Ministers a note which in particular pointed out cases of violation of times of construction of a number of facilities at Timano-Pechora TPC. The government of the autonomous republic obliged the pertinent organizations to adopt measures for the elimination of the violations and the fastest possible start up of the facilities.

It should be pointed out so far not all arbitration units have been conducting such work with sufficient initiative. Analysis of materials coming from arbitration units located in the regions of development of regional production complexes shows that some arbitration units are restricting themselves to secondary matters and do not thoroughly study the state of affairs in regard to the fulfillment of complex programs. Contacts are inadequate with finance, statistical and other monitoring organs. As a result, important aspects are not being analyzed relating to the formation of TPC, few proposals are being made for improving regional operational ties and fuller use of the production potential of the complexes. In Krasnoyarskiy Kray and Belgorodskaya, Kurskaya and Omskaya oblasts, these aspects have still not become one of the most important directions of law application and preventive work by state arbitration units.

I would like to direct the attention of the state arbitration organs of these regions to the weak use of the new forms and methods of work provided by the Law "On State Arbitration in the USSR." In the planning of acquaintance with the use of legislation on conclusion and fulfillments of contracts and generalization of the materials of dispute, the construction progress of the most important facilities of TPC, regularity of their supply and other matters frequently remain outside the field of vision of arbitration units. The attention of the juridical services is not sufficiently stressed in regard to the need of active employment of legal means for cooperation in the realization of complex programs.

Direct operational ties between arbitration units require development. If, for example, the arbitration organ of a republic or oblast within the zone of a pertinent complex discloses a violation of commitments for deliveries made by enterprises in another oblast, it must inform the arbitration organ of that oblast. On the basis of the obtained materials, the arbitration unit can initiate a case in regard to the guilty operational organs, familiarization could be done and other measures could be taken.

In the light of the tasks set forth by the 26th CPSU Congress relating to the socioeconomic development of the USSR, state arbitration organs of Russia must systematically contribute to the implementation of the party's economic strategy, to the realization of complex programs and with all their work to contribute in every possible way to the fulfillments of the targets of the 11th Five-Year Plan.

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7697

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